

MASSACHUSETTS PLOUGHMAN



JOURNAL OF

AGRICULTURE

VOL LXII. - NO. 48

BOSTON, MASS., SATURDAY, AUGUST 22 1903

WHOLE NO. 3212

MASSACHUSETTS PLOUGHMAN
Official Organ of the N. E. Agricultural Society.

MASSACHUSETTS PLOUGHMAN PUBL. CO.
Publishers and Proprietors.
ISSUED WEEKLY AT
NO. 5 STATE STREET,
Boston, Mass.

TERMS:
\$2.00 per annum, in advance. Single copies 5 cents.
All persons sending contributions to the PLOUGHMAN for use in its columns must sign their names, not necessarily for publication, but as a guarantee of good faith, otherwise they will be considered as waste-paper. All matter intended for publication should be written on one side of the paper, with ink, and upon one side.

Correspondence from practical farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may wish. The PLOUGHMAN offers great advantages to advertisers. Its circulation is large and among the most active and intelligent portion of the community. Entered as second-class mail matter.

A Live Vermont Dairy Farmer.

We have some good farmers here in Franklin County, where dairying is so largely followed, and occasional articles as to what they are doing and how will appear as opportunity offers. This letter will be devoted to the farming operations of E. M. Kimball of Berkshire.

The farm comprises two hundred acres, but considerable in the pasture is ledgy waste land. Only about forty acres are included in tillage and meadows, but the soil must be wonderfully productive to furnish fodder for over fifty head, including forty-one cows and four horses. A five-year system of rotation of crop is practiced, which allows of the land being in hay only three years at a time. This, with good previous cultivation and well fertilized, should result, as it must, in excellent crops of hay, as the meadows do not have time to run out before they will again be devoted to corn and other preparatory crops.

There is some old hay in the barns and the crops are promising well for a not very favorable season, so there will not be a necessity for disposing of stock for want of fodder. The cattle barn is 100x44 feet, with large basement stables. The manure goes into an adjoining building, easy of access, leaving the stables roomy, light and clean. There is water in the barn, but every fair day in winter the stock is turned out of doors for exercise.

A large stone silo of 120 tons capacity adjoins the barn, and this is enclosed with a building to protect it from the weather. In this way, it is reasonably thought, the silo will last much longer.

Full-blood Jersey stock is kept, of which twenty-five are either registered or eligible to registry. The stock originally came from Pomfret and Randolph, and is of approved dairy strains of blood.

The butter is put in thirty-pound tubs and shipped to a dealer in Boston. The cows have been steadily gaining in production of butter for several years, and last year reached an average for forty-two cows of 325 pounds per cow. The average price for the year was 23 cents a pound, and the amount received per cow \$77.37. A good record truly for so large a dairy.

Last year each cow's milk was weighed daily, a record kept and once a month the milk was tested. In this way some interesting facts were brought to notice.

The best cow was found to produce 479 pounds of butter, and six went over four hundred pounds. One was found that only produced 174 pounds, and it is needless to say that she did not long retain her place in the dairy—although previously considered a good cow. But it must be a pretty good dairy of this size that could only turn out one poor cow.

It is needless to say that this stock has good quarters for the winter and excellent keeping and care the year round.

Grain of some kind is fed to the cows all the year; that is, when giving milk; about one-half as much grain in summer as in winter. The summer feeding has kept up the flow of milk and is considered profitable.

Cows commence coming fresh milk in September, and butter is made the year round. After feeding what skimmed milk is required for the calves, the remainder is given to pigs; the sales from this source average about \$200, while there is quite an income from the sale of calves above what are wanted on the farm. There is also a good sugar orchard. E. R. TOWLE, Franklin County, Vt.

Millet for Ensilage.

In further reply to J. D. Van Valkenburg's inquiry about the use of millet for ensilage, the following information has been kindly offered by station specialists. Mr. V. had plowed twenty acres of corn which looked poorly and had replanted to millet.

I fear that Mr. Van Valkenburg would not be satisfied with silage from this source. The various grassaceous plants with hollow stalks appear to be unsuited to the manufacture of silage. I have always held that there is no gain in putting in the silo any plant which may be satisfactorily cured, unless, of course, one wishes to secure succulent material to give variety to the ration during the winter season. To this statement should be added the fact that silage from oats, millet and similar materials is not desirable.—W. H. Jordan, Director Experiment Station, Geneva, N. Y.

We have had no experience in the making of silage from millet, but I can see no good reason why it should not make silage. Other experiment stations have had broader experience in the making of silage from crops other than corn, soy beans and cow peas, than we have had here.—E. B. Voorhees, Director Experiment Station, New Brunswick, N. J.

The Hatch Experiment Station has found the Japanese barnyard millet a good crop for the silo. The yield on similar soils is about equal to that of Leaning corn, and if put in when in the early milk it makes excellent silage. It should be run through a fodder cutter for the best results. It can be cut by the use of the mowing machine, but the binders made for grain will not handle it. We need a machine similar in principle to these binders, but made heavier and stronger so as to handle this millet. The best crop that can now be sown for forage is Hungarian and it can be ensiled with good results. Barley may also be grown and put into the silo, though the crop is rather likely to rust.—William P. Brooks, Professor of Agriculture, Amherst, Mass.

Experiments with millet as material for silos have not been numerous, and not very much practical experience is available. If the variety grown is the Pearl or other large growing sorts it can, no doubt, be used for silage to advantage, but if the smaller and finer varieties of millet are grown these can be made into a satisfactory quality of hay so readily that the economy of putting them in the silo may be questioned. If the millets are allowed to become fairly well matured before placing in the silo, they may be too dry to settle well and make the best quality of silage. Under these conditions it would be a benefit to add water as the silo is being filled. Fairly succulent material will settle compactly, and exclude the air so as to keep thoroughly well while that which is lacking in moisture remains loose, and admits sufficient air to create too great fermentation, and fire-fanging is likely to take place. Under these conditions the addition of water becomes desirable.—J. L. Stone, assistant in agriculture, Cornell College of Agriculture.

Although millet has been used for silage, this use of it has not been very extensive. There is very little experiment station literature on the subject; no experiments with millet as a silage crop have been conducted at the Pennsylvania experiment station. The difficulty of getting millet thoroughly compacted in the silo is perhaps the chief objection to its use in this manner. It being lighter in weight than corn and many other crops, it does not settle down so compactly, and therefore would require more tramping and care in filling the silo. Its tendency to decay would probably not be so great as that of leguminous crops, but it probably would have a greater tendency to mold than corn silage, because it would contain a smaller amount of moisture and would not be so compact in the silo. It would not make as good feed as corn silage, for the reason that millet in general is not so palatable or nutritious as corn. However, as before stated, the chief drawback to the use of millet as silage lies in the difficulty of sufficiently packing it to exclude the air.—Thomas J. Mairs, Assistant Professor of Animal Industry, Pennsylvania State College.

Farms in Good Demand.

Corn in this vicinity is a failure and potatoes nearly so. Many fields of oats are rusting. The grass crop is heavy and not yet all out. The quality exceeds any crop for years.

Cows are in good demand. Many are having them tested, a small per cent. having been killed. Heavy beef cattle are slow and not in much demand. Working oxen are drug. Butter is eighteen to twenty-five cents. Eggs twenty-four cents. Many back farms are selling for the timber, which is in great demand, and prices range high. The slaughter of spruce trees is fearful. The call for Christmas trees, paper stock and sawed lumber is leaving little for future generations.

A good demand is noted for small farms at low prices for homes. Real estate agents are busy, with customers mostly York State people. Free rural delivery brings the remote places in touch with the outside world. The creamery at Cavendish, Vt., is a success in every way, paying patrons a good price for butter, but one great drawback is the high cost of centrifugal separators, which seemingly must take a drop, as did sewing machines and bicycles. Ludlow, Vt. S. S. MAYO.

Rushing the Wheat Harvest.

The wheat harvest in the wheat belt lasts from ten days to two weeks. It is the one busy season of the wheat farmer. Threshing may wait a day or a week. The planting season runs through two long months, but the harvest is always a thing of the here and the now.

To the harvest field two processes are brought—those of the header and the self-binder. The former requires a larger force, the latter involves the greater amount of labor. The Kansas wheat is harvested mostly with the header. It cuts the grain and gets it in stack ready for threshing the same day. Following the binder, the bundles are shocked and afterward stacked by a more leisurely process, or hauled to the machine direct from the shock. The header cuts a swath of grain twelve feet wide. From the sickle the grain is elevated by a carrier to a wagon equipped with what is known as a "header" box. The "header" box is mounted on a farm wagon, the motive power of which is furnished by a team of horses. The wagon is driven parallel to the header and at the same speed until the box is full. Then it goes to the stack and another wagon takes its place. From four to six horses are required to operate a header. They are hitched to a lever directly behind the sickle and push the machine instead of pulling it.

Seven men make a header crew. One is required to drive the horses attached to the machine. There are two wagons equipped with "header" boxes to take care of the grain. While one of these wagons is load-

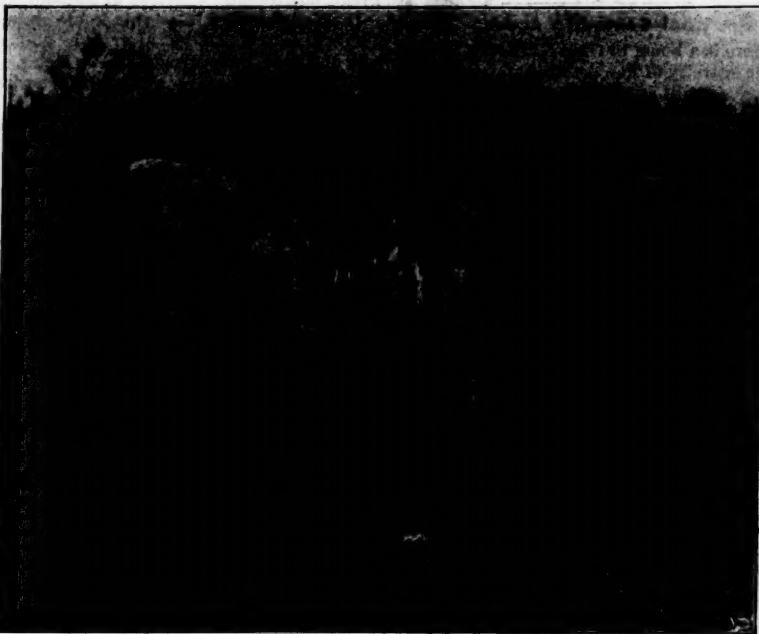
ing at the machine the other is unloading at the stack. There are two men to each wagon, one to drive the team and the other to distribute the grain as it comes from the header carrier. They unite in unloading the grain at the stack. Then there is a staker, who is the skilled labor of the wheat field and a helper. The header will cut from twenty-five to thirty-five acres of grain a day, and a crew of seven men will have it safely in the stack at night. Headers are so called because they cut the grain at a height of ten to fifteen inches from the ground.

The binder sickle runs close to the ground and leaves a stubble from four to six inches long. The binder process is slower than the header and requires less help. Three horses are required to pull a binder, and the machine cuts, under favorable circumstances, about fifteen acres a day. Following the binder, which gathers the wheat into bundles and ties it automatically, are two men. They gather the bundles of wheat and set them up in shocks of ten or fifteen bundles each. The binder is about half as fast as the header and requires less than half the force, but it imposes the additional labor of stacking later on.

The continual call for help from the wheat country is easy to understand when

thinning as the trees become crowded, pruning and trimming to secure straight, clear stems, and the underplanting of all vacant and thin spots with some valuable tree, usually the white pine. This method of proceeding has worked profitably in Pennsylvania, and has been urged by expert authority as adapted to other sections. The increasing market value of forest products makes systematic and careful management more and more desirable.

An idea of what may be effected by making the most of a piece of woodland, is shown in the case of the forest owned by the university of the South at Sewanee, Tenn. The forest had been mismanaged and was said to be losing value. In 1900, the United States Bureau of Forestry undertook its management, the principal condition being that it should be done at no cost to the university. A plan of management was devised which has proved profitable and has left the forest in good condition after lumbering. When the co-operative plan was begun a conservative estimate of \$3000 was the value placed upon the timber. Under the plan of management a net profit in 1901 of \$1500 was secured, the following year about \$1200. It is said that four years more of lumbering remain to be done and for at least three years the



DOLLY BLOOM 12770. ADV. R. NO. 40.
453.86 lbs. butter fat in 1 year as a 2-year-old.
The largest official Butter Fat record of a two-year-old Heifer in the world.
(From a picture taken after cow had been milked 14 months.)

one knows that when it comes to harvesting wheat it is now or never. A header crew will take care of no more than three hundred acres. In other words, during the harvest season a header crew is required on every farm. The farmer who raises three hundred acres of wheat cannot, as a rule, furnish more than two members of the crew from his own farm. He cannot secure these men from among his neighbors, for his neighbor also raises wheat. The result is that five of the seven men required must come from outside the community. So long as there is no urban population from which to draw, the wheat raiser must bring his help from the outside. And so long as there are big crops of wheat there will be a demand for harvest hands beyond the available local supply.—Topeka Capital.

Bees Annoyed by Skunks.

Sometimes a colony of bees will become unaccountably cross, keeping a heavy guard at the hive entrance, and attacking any one who goes anywhere near them. In such case, the cause of this irritability frequently proves to have been a skunk. They sometimes annoy the bees in summer, but we have usually found them most troublesome in the fall.

One of our apiaries in particular has for years apparently been a regular stamping ground for skunks, and we have killed them off by the dozen during the fall months. After the weather becomes quite cool their depredations are more disastrous, as their scratching on the hive causes the bees to fly out in large numbers, and those not devoured perish by being chilled. Good, large swarms are sometimes ruined in this manner. A steel trap is the surest way of ridding one's self of such a nuisance. We attach the trap to a stout pole, or scantling, about fifteen feet long, as they are not likely to walk off with that, and set it near the hive entrance. We do not often use bait, but last spring after three traps had been successfully avoided several nights in succession, while our chickens disappeared like magic, we used scraps of raw meat as bait, and with results. We take hold of the end of the pole and carefully hobble his skunkship down to the brook, and all is over in a few minutes, and with no odor, such as is sure to be caused if they are killed by clubbing or stoning. Vermont. HILAS D. DAVIS.

More Profit from Woodlands.

Connecticut's trial at State forestry is making an ambitious start under conditions which ought to show profits. It appears that plenty of land suitable for the purpose has been offered at \$4 or less, per acre. Interest on the investment will certainly be a small item in cost of the product. It is proposed to plant to oak, pine and chestnut. Experiments of this kind are desirable, but for the average farm owner the more important matter is the saving and care of the woodlots as they now are. The approved plan consists in removal of all dead, diseased, or otherwise undesirable trees,

annual profit should be about \$1500 a year, making the forest yield a profit of about \$7000 from timber formerly valued at \$3000. These profits were made possible through the careful planning of the lumbering in order to prevent waste and to secure the largest returns from the merchantable trees. In all the cuttings provision was made that the land should again produce valuable timber. In other words, there was a profit well above one hundred per cent. and small trees enough left to start another crop. This is the result of gradual cutting by selection, grading the lumber, etc., and selling to best advantage.

Such results as these, which have been repeated in Pennsylvania and elsewhere, have aroused considerable interest, and movements to establish some public system toward forestry improvement have been started in many States. Prof. W. R. Lazenby of Ohio recommends the exemption from taxation of a certain percentage of woodland on each farm, the appointment of a State commissioner of forestry, the establishment of a school of forestry in connection with the State university, the establishment of a State arboretum where every species of forest tree could be grown, and the securing by the State of large tracts of cheap lands to be managed as State reserves for permanent forests. As the forests of Ohio cover only fourteen per cent. of the area and are yearly growing less, it seems high time something was done.

In New Jersey there seems to be considerable low-priced land, which could be used for such trees as willow, cottonwood, black locust, black walnut, tulip tree, yellow and white pines and white cedar. F. R. Myer of this State recommends planting such varieties and also willows for osiers. He mentions a fifteen-acre osier which cost eight years ago \$75.00 per acre, but gives a yearly profit of \$28 per acre.

Michigan authorities have been somewhat anxious over the rapid disappearance of the pine forests in the southern part of the State and are thinking of trying more careful methods. New York forestry has received something of a setback in the closing of the Cornell School of Forestry, but judging from events in other States the halt is only temporary.

In New England nearly all the States have shown increasing interest in forestry matters. There is a tendency to encourage tree planting, but private owners have not followed State lead in this direction to any great extent, and recent events suggest that most of the immediate progress will be in the line of co-operation of forest owners with State and Government experts in care and marketing of the timber land already existing. The bureau of forestry is now working with twenty-five tracts of forest land in northern New England, having devised a working plan for each lot. Object lessons of this kind if successful will quickly spread the main ideas of the new practice.

Movements of this kind should help lift the price of sproutland and young growth, the value of which has tended to decline.

Land which sold for \$15 to \$20 per acre twenty-five years ago has been sold at \$7 to \$12 in recent years, although improved lumber markets should have turned prices in the other direction.

The frequency of forest fires has probably caused a part of the depression in such property. In thickly settled regions the large tracts of woodland are almost sure to be burned over sooner or later. A better system of protection would doubtless help present values more than anything that could be done. In Minnesota a good system is now in operation over about nine million acres of forest lands, and the execution of the law is placed in the hands of the town supervisors who are made fire wardens. A chief fire warden is provided for by the law, and it is made his duty to investigate the various aspects of forestry and report annually to the proper State authorities. The present appropriation for carrying out this law is \$5000, and a scale of compensation is given by which citizens who are called upon to help extinguish or control fires are remunerated. A somewhat similar plan in New York State has apparently prevented considerable loss from fire.

Progress is rapid in the three divisions of planting, management and protection, but for many years to come the lines of effort showing quick and profitable results seem likely to take the lead.

A Farm Icehouse.

Experience has taught that it does not always pay to build an elaborate and expensive covering for the winter product. A cheaper structure, described in the Farmer's Guide, will prove to be just as well in regard to the keeping of the ice, and in all probability will last nearly, if not quite, as long. Its location should be selected with the utmost care, as it is upon this point that success will largely depend. Rather high ground or a small knoll is best, as it affords a good drainage in all directions. If the question of drainage in this way bothers at all, it might be well to place a tile drain under the place where the house is to stand. However, unless the ground is altogether of a level character, this will not be deemed a necessity. Another element of preparation of the ground, which may not always be found necessary, and yet which is never out of place in the construction of a good house, is a filling in, with either loose dirt or gravel, to a depth of from three to six inches. Upon this, we should throw a few old rails or other pieces of wood that would serve to keep the bottom open. The size of the house should not be less than twelve or fourteen feet square. Now that we have our location and floor, we will consider the house proper. In making this we would first set corner posts out at the right length to afford the desired slant to the shed roof, which we would put on later. Good material for these posts is common pine or hemlock 4x4 scantling. Between these at distances from three to four feet set 2x4 studding of the same stock, with the two-inch face outward. By now placing a plate along the top of the front and back sides for the roof to rest upon, our frame is complete and ready for inclosing. In the making of this frame, if one did not wish to go to the expense of the sawed planks, round green timber cut from the wood might be used instead. If this is done we should have the posts of as uniform a size as possible in order that the sides may be square and regular. On the inside of these posts place boards of any sort. Anything that will serve to keep the sawdust from leaking to the outside. The building is now ready for the ice, and the only thing of further necessity is a good board roof. On this no shingles are needed, and it may be placed before or after filling.

At the end, or upon the front side, a door must be left for putting in and taking out the ice. This may be conveniently made by an extended opening from the top to within about two feet of the ground. It may be closed by short, loose boards on the inside, and two swing doors on the outside.

Connecticut Farm Notes.

In many respects this seems to be an off year for farming. While the grass crop gave promise of but a poor yield the first of June, owing to the extremely dry May, a good average crop has been secured of good quality.

Corn is not "in it" this season. There is hardly a respectable looking field of corn in this section. It came up poorly, and in nearly all fields it had to be planted over, so that it is late and very uneven, and the promise for an average crop is slight. There is as yet no sweet corn large enough for table use, and but very little is seen in our local markets, and what there is seems small and poor in quality.

While potatoes have grown well, and look thrifty, I do not think the yield will be a large one. The wet weather in June was too much for the potato beetle, and but little parsnip green has been used this season. The onion maggot, however, got in his work and some fields were entirely ruined. The apple crop, with the exception of some early varieties, will be a light one.

Nearly all the milk from this section now goes to Boston. Those who formerly sent their milk to Providence are now sending it to Boston. There are but few, if any, plums and peaches about here, the late spring frost having destroyed them.

Farm laborers are not very plenty, and any man that wants to work can find employment. How to secure good farm help is becoming a hard problem.

Why do not more of our young men take to farming? There is more money in farming today than there was in the days of our grandfathers.

Methods have changed—the demands for farm and dairy products have increased.

The farmer is no longer an isolated being shut out from the rest of his fellow men. The rural mail carrier brings him his daily paper, and in many cases the electric cars run past his door.

Free rural delivery is a great boon to the farmer, as he can now get his mail daily without the trouble of going from one to three miles for it. Many farmers have a daily paper, when they would not have one if they had to go to the postoffice for it. In my own town where but half a dozen dairies were taken previous to the establishment of rural delivery, more than fifty daily papers are now taken. Thus the farmer is brought into daily contact with the world.

There ought to be no abandoned farms in New England, and I believe the day is coming when there will be none. S. F. L. Columbia, Ct., Aug. 10.

Green Mountaintop Notes.

As I have traversed the summit section of the Green Mountains, during the past two weeks, around Greensboro and neighboring towns, I have found the hilltop farms fully as smooth as those less elevated. Really, it seems more of an ideal dairy section than that around St. Albans, and the appearance of the various creamery products would seem to confirm the idea. But there is no one large organization to manage the business or concentrate the product as in Franklin County. Some of the best creameries are in Walden, Hardwick, Walcott and those at Morrisville, on lower ground.

I have seen the best show of apples on the extreme mountaintop farms. Grass even to this date seems to be growing in the hay fields, and rarely have I seen in this section a field of any extent that seemed suffering because uncut. The proportionate crop is still reported very variable, from one-half to a full average one. In many towns but little more than one-half the crop is yet harvested. Corn, although backward and very variable in growth, is reported to be in much better condition than last year at the same date, while oats and potatoes continue to look remarkably well. Only about two good "hay days" per week has been the rule, and this third day of this week with its rain seems to portend no good change.

A curious fact in the topography of the section is that within a radius of a few miles the water reaches the Atlantic through rivers running north, south and west; to the north through the Black River, Lake Memphremagog and the St. Lawrence; to the south by the Connecticut river and Long Island Sound, and to the west by the Lamotte River, Lake Champlain and river St. Lawrence again. At near the same high elevation is Lake Caspian, covering 1200 acres, with nothing but small rivulets and springs to feed it. H. M. PORTER. Morrisville, Vt., Aug. 11.

Two Ways of Keeping Manure.

In 1899-1901, three series of steer-feeding experiments were made at the Pennsylvania station, and a report has just been made comparing the gains obtained from animals kept without tiling in a box-stall and from those tied as usual in ordinary stalls, the former being watered in the stall, the latter turned out daily to water. The results show that by the former method a very large saving in cost of attendance is secured, without any decrease in the gain of live weight or any disadvantage, as respects the quantity of food required to produce it. The relative economy of the two methods is, however, not fully demonstrated until the value of the resultant manures is known; for these differ materially in the conditions of their preservation.

The manure from the box-stall was formed upon a cement floor, and was kept under the animals, compacted by their trampling, until the close of the experiment; that from the animals tied in the stalls and watered in the barn-yard, was, on the contrary, daily removed and stored in a compact heap under conditions closely approximating those of a covered manure-shed, except that it was not subject to trampling by the stock.

The fertilizing constituents in food and litter, less those used in forming new animal tissue, were compared with those recovered in the two manures. The comparison is especially interesting because of the increasing use of the covered-shed method.

The trampled manure suffered little loss of fertilizing constituents, though less than two-fifths of the dry matter of food and litter was recovered in the manure. The covered-shed manure lost one-third of its nitrogen, one-fifth of its potash and one-seventh of its phosphoric acid. Only one-third of the dry matter of food and litter was recovered in the manure. The potash and phosphoric acid losses must be explained by seepage of liquid manure into the clay floor. The loss of nitrogen is, however, chiefly due to volatilization of carbonate of ammonia.

The money value of the fertilizer constituents lost by the second as compared with the first method, is equivalent to \$2.50 for each steer stalled for six months.

Therefore, manure, if prepared upon a tight floor and with such proportion of litter that it can be trampled into a compact mass loses very little, if any, of its fertilizer constituents so long as the animals remain upon it. This method of preserving steer-manure is therefore distinctly superior to that of the covered shed, though the latter method may not always exhibit as great loss as that observed in this experiment.

Soapsuds will do more for growing plants than many of the costly fertilizers, and not one bucketful of it should be wasted. If you have a deliaefae tree, throw the suds from the laundry around it, and you will be surprised to see how soon it will take on new life.—A. M. Vantine, Pennsylvania.

Butter Markets Firm.

Supplies are moderate and prices tend to improve for the more desirable grades. Firsts and extras show an advance of about one-half cent per pound, ruling at 20 1/2 cents for best makes of creamery in tubs and 18 1/2 cents for the dairy. Print and box goods, as usual, bring about one-half cent above tub, and are selling readily when good. Lower grades of all kinds are moving slowly at about last week's prices. Cheddar & Adams: "The market is well supplied, but the receipts are falling off a little and prices have advanced fully half a cent. The increase in speculative demand for storage has helped improve the market."

Firm markets prevail at New York, owing to smaller receipts and the presence of out-of-town buyers evidently looking for storage stock. Perhaps 19 1/2 cents is the most common sale price of extra creamery. Some lots scoring as high as 94 cents bring 102 cents. Firsts are also in good demand, but other grades do not seem to feel the advancing tendency. Dairy holds about steady under moderate receipts. Quite a proportion of the dairy now arriving is of low grade.

The cheese market shows no decided change, although some grades show a weaker tendency as evidenced by fractional declines in price. In Boston 10 1/2 cents is about top figure, and the general range of Northern cheese is between 9 and 10 cents. Export demand has nearly ceased for the present, but in both New York and Boston. At New York best fancy cream, small size, brings 10 1/2 cents. Part skims tend a trifle lower than last week, but most grades are steady and in good home demand.

Receipts at New York for the week 4400 packages of butter, 3000 packages of cheese and 5000 cases of eggs. For the same week last year the figures were 5908 packages of butter, 3073 packages of cheese and 5327 cases of eggs.

At Boston, receipts for the week were 32,866 tubs, 27,444 boxes, or 1,754,273 pounds of butter and 9005 boxes of cheese and 18,429 cases of eggs. Same week last year, 32,702 tubs, 28,893 boxes, or 1,698,930 pounds of butter, 4935 boxes of cheese and 21,815 cases of eggs.

Provisions About Steady.

Net quotations hold about as quoted last week, the tendency having been rather than down on both pork and beef.

The beef arrivals for the week have been much smaller than for the previous week. The total was 151 cars for Boston and seventy-one cars for export, a total of 222 cars; preceding week 110 cars for Boston and 174 cars for export, a total of 284 cars; same week a year ago, 127 cars for Boston and sixty-two cars for export, a total of 189 cars.

Lamb is plenty and lower. Veals firm and poultry rule considerably lower for broiler and rooster stock, also for pigeons and ducks.

Hog receipts at Boston have been moderate. The total for the week was about 21,300; preceding week 20,090; same week a year ago, 18,900. The export demand has increased materially, the total value by Boston packers having been about \$185,000; preceding week, \$130,000; same week a year ago, \$145,000. There is a further moderate decline indicated in number of hogs marketed for the week, according to the Cincinnati Price Current. Total Western packing, 345,000, compared with 390,000 the preceding week, and 405,000 two weeks ago. For corresponding time last year the number was 365,000, and two years ago 430,000. From March 1 the total is 8,855,000, against 8,770,000 a year ago—an increase of 85,000. The quality is not so uniformly good, and in some instances is reported as poor. Prices at the close indicated an average of \$5.40 per one hundred pounds for prominent markets, compared with \$5.40 a week ago, \$5.75 two weeks ago, \$7.45 a year ago, and \$5.75 two years ago.

Vegetable Markets Firm.

Dealers report trade light. This is the season when consumers are fewest. About Sept. 1 the crowd will begin to return from the summer resorts, and demand will improve. The supply is moderate in all lines and no glut appears in any direction. Dealers and farmers who bring loads to market agree that the vegetable supply is unusually short, and some are predicting high prices this fall and winter. "Unless coal goes up again," said a prominent commission dealer, "next winter ought to prove profitable for housewife stuff." Cabbages are in light supply and still bring rather high prices. Onions are in fair supply and prices steady. Potatoes seem a little weaker as the supply increases. Stock for sale in Boston is now mostly from New Jersey and Long Island. Good New Jersey potatoes sell at 75 cents in large lots, as the prices in local markets are often better than in Boston, and local buyers are less exacting in regard to size and grading. Turnips are becoming more plenty. Prices so far have been high. Cucumbers are in light supply and higher. Tomatoes, both home and Southern, have sustained their prices unusually well, owing to the lateness of the outdoor native crop. Native tomatoes are still very scarce. Hothouse tomatoes, many of them poor, vines having become weakened through long bearing. Sweet corn holds price well, the ears average rather smaller than usual. The salesman of the Coolidge Farm, Watertown, says that the early crop there is nearly done, and has averaged about \$1.50 per bushel for right through. This farm is famous for very early vegetables. Its Scallop squashes are selling at \$1 per bushel, which seems low, but it is owing to large shipments from the South.

At New York potatoes are still in moderate supply, and prices are well sustained. Sweet potatoes are more plenty, but meeting a moderate demand at about previous quotations. Red onions are higher under light offerings; other kinds generally firm for choice qualities, but prices without notable change. Cabbages hold firm under light receipts. Cucumbers scarce and firm. Egg plants and peppers are in lighter supply, but prices show little change. Fancy large green corn is scarce and wanted. Lima beans rule a little easier. Western New York green peas and string beans are in good supply, and prices a little less firm; very few of the peas brought top quotation; occasional lots of very fancy string beans bring slight premium. Tomatoes have sold better and prices averaged a shade higher, although the range of quotations is without much change; occasional lots of extra fancy Acorn bring a slight premium.

Hay Tending Downward.

Increasing supplies and the prospects for heavy receipts of the new crop unite to gradually force the price down. The best grades of old hay still hold up well because many buyers will have it at any price, but low grades are dull and in oversupply. New hay in large quantities has reached many of the markets. It starts at \$2 to \$4 below

old hay, and being mostly of fairly good grade, tends to depress the price of the old stock. For some time to come buyers will give old hay the preference in Northern markets.

At New York there is quite a surplus of medium and low grades. The weakness of the market has tended to reduce shipments, which were 7297 tons the past week. Considerable new hay is at hand, and many dealers look for a further break in prices as soon as the new crop becomes seasoned. Straw is scarce and higher.

Buffalo reports much old hay still at hand and bringing \$16 to \$18, compared with \$13 to \$15 for new hay. At Boston all grades are lower, new hay about \$2 or \$3 below old, and the tendency is still downward. Receipts for the week were 233 cars, nearly all for local markets. Rye straw is a little higher. Western markets report a good demand at the lower level now prevailing. Southern markets are all dull and easy with downward tendency, owing to new hay arriving very freely. These conditions are considered likely to prevail further North as the season advances.

The Canadian hay trade is reported as in a very mixed condition at the moment, owing to the uncertainty as to how the crop will be saved. Up to the commencement of the present week there were fields that had not been housed, although they were out ten days previous. Much, if not all, of this hay will be poor in quality, as repeated rains have kept it in a wet condition, some on the swarth and some on the creek. This refers to sections south of the St. Lawrence river. On the North shore, however, cutting only began at the close of last week. As regards yield Quebec will have a pretty fair crop, although it will not doubt be under the average. The market is easy, prices as quoted in Montreal Trade Bulletin having declined fully \$1 per ton, and quite a few transactions have transpired at the lower rates. Bad as the English market is said to be, shipments continue to go forward, about eighteen thousand bales being shipped last week, besides 3000 bales sent to South Africa last week. Until the crop is harvested the market will be in an unsettled state.

The following shows the highest prices for hay, as quoted by the Hay Trade Journal, in the markets mentioned at this date: Boston \$21, New York \$23, Jersey City \$21, Philadelphia \$19, Brooklyn \$22, Buffalo \$18, Pittsburgh \$19, Duluth \$13, Minneapolis \$10.50, Baltimore \$19, Chicago \$14.50, Richmond \$18, Cincinnati \$17.50, Nashville \$13.50, Kansas City \$9, Washington \$16, Memphis \$13, St. Louis \$11.50, New Orleans \$18, Montreal \$11.50.

Grain Slightly Higher.

Recent crop news has been somewhat less favorable, and the result is shown in a moderate tendency upward in wheat and corn. Feeds show slight changes in the same direction. Bag meal is a point or so higher. Cottonseed bran, millfeed, etc., remain about as last quoted.

The Government report, issued the first of the week, was something of a disappointment in wheat, but corn promises rather better than was expected. Estimates by J. S. Brown, official statistician of the New York Produce Exchange, based upon the Government report, indicated a corn yield of 2,345,000,000 bushels, compared with a harvest of 2,323,448,000 in 1902 and 1,522,520,000 in 1901—the "calamity year." The total yield of wheat, he says, will be 650,300,000 bushels, compared with 670,100,000 in 1902.

Winter wheat is nearly all garnered, and the Government estimate places the yield at 410,000,000 bushels, 35,500,000 bushels less than indicated July 1. The estimated yield of spring wheat Aug. 1, 2,397,872,000 bushels, is 17,357,000 bushels less than indicated July 1.

Area of corn, according to the tables used in estimating, amounted to 89,800,000, compared with 94,043,619 in 1902, and a five-year average of 93,297,386, while the acreage of spring wheat was 17,257,000, compared with 17,021,000 in 1902, and a five-year average of 20,204,300.

On the whole, nearly all harvested, will yield 79,455,000, compared with 85,172,000 estimated July 1. O. K. Lyle, another crop expert of the New York Exchange, estimates for corn: "On basis of five crops—1898-1902, inclusive—the August condition of 78.7 on 89,800,000 acres for crop 1903, suggests 2,346,616,000 bushels; and for spring wheat, on basis of five crops—1898-1902, inclusive—the August condition of 77.1 on 17,257,000 acres for crop 1903, suggests a crop of 232,283,000 bushels." But notwithstanding the report, there seems to be quite a general fear that the corn crop will not meet full expectations, and its upward movement. With other grains, the Government estimates of the per cent. of a full crop are as follows:

Oats, Aug. 1, 79.5; one month ago, 84.3; Aug. 1, 1902, 89.4; Aug. 1, 1901, 85.6; ten-year average, 82.5. The proportion of last year's crop held by farmers is estimated 7.4 per cent, as compared with 4.2 one year ago, 5.9 per cent. two years ago, and an eight-year average of 7.4 per cent.

Barley, Aug. 1, 83.4; one month ago, 87.2; Aug. 1, 1902, 86.9; Aug. 1, 1901, 85.4; ten-year average, 83.4. Spring rye, Aug. 1, 87.2; one month ago, 90.5; Aug. 1, 1902, 83.6; Aug. 1, 1901, 85.3; ten-year average, 85.3.

Buckwheat acreage less than last year by about 500,000 acres; condition: Aug. 1, 93.9; one month ago, 91.1; Aug. 1, 1902, 91.1; Aug. 1, 1901, 90.1; ten-year average, 89.8. Apparently the ruling price of 80 cents, more or less, for wheat fairly represents the present situation as viewed by the crop reporters. Oats, according to the report, will be a little below the average in yield, but are not likely to reach the extreme prices of 1901-02. Barley promises about the average, while rye and buckwheat are somewhat above the average.

The official freight circular makes the New York exports to Europe 165,228 bushels of wheat, 289,538 bushels of corn, 25,173 bushels of barley, 49,392 packages of flour and 13,273 bags of corn meal. Exports from Boston have also increased decidedly during the past week.

A Nation of Meat Consumers.

If Germany does not remove the bars she has raised against the importation of American meat products her middle classes will be left to the alternatives of starvation or emigration, according to an investigation made by the National Provisioner, the organ of the provision trade in this country. The paper thinks there are indications that the restrictions governing meat importation will be lightened instead, to the great benefit of American trade, for the simple reason that, unless that is done, Germany cannot feed her own people. It figures that there are out of the total population of fifty-six million, seven million German families, whose annual earnings average only \$230, or \$45 a head a year, and five million more families that earn not

more than \$500 a year, or \$100 a head.

Just how much meat these can afford to eat when that article was from fifty to one hundred per cent higher in price than it was here—and millions of dollars' worth have been barred since by the prohibitive meat regulations—cannot be estimated.

Apart from the raising of prices by the restrictions of the supply, it is argued further that Germany cannot feed her own people any way. By official count a little more than two years ago the country had only eighteen million cattle, less than that number of hogs, ten million sheep and almost three million goats to feed her population.

Assuming that the same proportion is killed there annually as here and the weight of the animals to be the same, there would be only seventy-six pounds of meat a head each year, or a little over three ounces each day, for the whole population, which is clearly not enough.

With only fifty per cent. more population than Germany the United States kills three times as many cattle, nearly five times as many pigs, and seven times as many sheep annually, and when all the great amount sent out of this country is allowed for, there is still left three times as much meat for every head of the population as there is in Germany.

That fact, the paper argues, makes us the biggest meat eaters in the world and the nation with the stoutest manhood, and in time it will make Germany come to us for some of our supplies.

Wool Continues Active.

There is a boom in Ohio X.X. fleeces, thanks to the scarcity of fine Australian. Ohio X.X. has advanced to 35 cents and costs 75 cents clean. Ohio decline sold at 25 cents. There has been no advance in X fleeces, which are fairly plentiful. Old Montana (1902 clip) fine staple was sold at 20 cents this week and new strict medium staple at 21 cents. There is a rush for quarter-blooded, B super pulled wools and imported Class 3 wools, to be used in making not carpets, but homespun and oberior cloths. These wools are but little scarcer than American wools and cost 12 cents the sourced pound less than domestic one-quarter blood combings. Quotations remain nearly unchanged from last week, but the market continues strong and active, with a brisk demand for the coarser wools, owing to the high price of the fine qualities.

The Phosphate Rock Industry.

The report on the production of phosphate rock in 1902 by Dr. Joseph Struthers is now in press for publication as part of the United States Geological Survey's volume on "Mineral Resources" for 1902.

The phosphate rock industry in Florida and South Carolina is gradually recovering from the setback it received in 1900. In Florida the decrease, as compared with 1901, in the production of hard rock and river pebble was more than compensated by the large increase in the quantity of lake pebble produced, though there was a decrease in the total value of the product. In South Carolina there was a slight decrease in both quantity and value; and in Tennessee there was a slight decrease in production and a slight increase in value of product. It should be borne in mind that the marketed output rather than the rock actually mined is the basis of the report on production of phosphate rock.

The figures for 1902 and 1901, respectively, are as follows: Florida, 785,430 long tons, valued at \$2,564,197, as against 751,996 long tons, valued at \$3,159,473; South Carolina, 313,365 long tons, valued at \$919,725, as against 321,181 long tons, valued at \$961,840; Tennessee 390,799 long tons, valued at \$1,206,647, as against 408,653 long tons, valued at \$1,192,690; total production for United States in 1902, 1,490,514 long tons, valued at \$4,683,444, as compared with 1,433,723 long tons, valued at \$5,316,403, in 1901, an increase in quantity of 6971 long tons, and a decrease in value of \$622,959.

Literature.

The unconvincing of Buck, a strong, handsome dog, a cross between a St. Bernard and a Scotch collie—that is the theme of Jack London's latest and best book, "The Call of the Wild." Buck was taken from his home in southern California, where Judge Miller and his family had petted him, by a dog agent to whom an unrepentant un-gardener sold him. After being broken in by a man in a red sweater, he was fit for the Klondike and was soon put at work drawing the sleds which carry the mails. Here is where his triumph begins. Among the other dogs which are in the same string—that is, attached to the same sled, is the leader Spitz, who becomes furiously jealous of Buck. In the course of their journey up the Pacific slope to Dawson Spitz takes every opportunity to display his enmity for the newcomer, and finally there was a fight to the death. It all happened during a rabbit chase. Spitz cut across and laydied the rabbit much to Buck's disgust. The time for a life-and-death struggle had come. Here is the vivid account of the contest, in brief, in Mr. London's own words:

"In vain Buck strove to sink his teeth in the neck of the big white dog. Whenever his fangs struck for the softer flesh they were countered by the fangs of Spitz. Fangs clashed and lips were cut and bleeding, but Buck could not penetrate his enemy's guard. Then he warmed up and enveloped Spitz in a whirlwind of rushes. Time and time again he tried for the snow-white throat, where life bubbled near the surface, and each and every time Spitz slashed him and got away. Then Buck took to rushing as though for the throat, when suddenly drawing back his head and curving in from the side, he would drive his shoulder at the shoulder of Spitz, as a ram by which to overthrow him. But instead, Buck's shoulder was slashed down each time as Spitz lightly leaped away. Spitz was un-



HARVESTING GRAIN.

See descriptive article.

ouched while Buck was streaming with blood and panting hard. The fight was growing desperate. And all the while the silent and wolfish circle (of the other dogs) waited to finish off whichever dog went down. As Buck grew winded Spitz took to rushing, and he kept him staggering for footing. Once Buck went over, and the whole circle of sixty dogs started up, but he recovered himself almost in midair, and the circle sank down again and waited."

And then the reader with his eyes glued to the pages follows the realistic progress of the desperate contest until Buck used his teeth on the left fore leg of Spitz, breaking the bone, then he repeats the attack on the right foreleg, until Spitz "saw the silent circle with gleaming eyes, lolling tongues, and silvery breaths drifting upward, closing in upon him as he had seen similar circles close in upon beaten antagonists in the past, only this time he was the one who was beaten."

And beaten he was, but the reader will read the details with avidity, even though it be a dog-fight. And Buck is a worthy hero. He becomes the leader of the pack finally, and later when the destination is reached he changes hands. It is impossible to lose interest in Buck's fortunes; the men who claimed him as their property may fade from the mind—they are not strongly drawn, but Buck stands out as vividly as our own kin in these pages of Mr. London's novel. And the ending of the story suggested by the title of the book is equally realistic; back among the denizens of the forest of the great northwestern portion of the continent which he leaves in the rear, he goes to find an animal he is, after all, not one of those humanized dogs which a certain school of nature and animal writers present to us. Not since "Rob, Son of Battle," was written have we had anything so powerfully realistic in which might be called "animal fiction" as this newest book of Jack London. The story of Buck grips one from the very start, until "the dominant primordial beast" asserts itself in Buck. "Incidentally we have a vivid glimpse of life in the Klondike during the gold-fever period. But it is the dog which dominates the book, and such a dog as we have never read about before, but once having read the book hasten to recommend it to our friends as an unforgettable tale told by a master hand." [New York: Macmillan Company. Price, \$1.50.]

It is not at all surprising that these days when the novelist is turning to timely topics for his subject, it would be strange if the atmosphere of the commercial and financial world permeated fewer books. The first "big book" of the year, "The Pit," was a tale of the Chicago wheat market; in "The Wars of Peace"—a book which is not in the same class, from a literary point of view, with Mr. Norris's story—we have the story of a great industrial combination which practically broke up a family and all but ended the life of a brilliant son, who had conscientious scruples against trusts. Alphonse Harding is the really modern hero, who is a leader in forming the combination—which is nicknamed a "missionary trust," and it is his son, Theodore, who steadfastly refuses to join in with his father. He therefore starts a mill of his own, with results which are eventually disastrous, for the author has introduced a melodramatic scene in which Theodore Harding's mill is blown up and he is temporarily buried beneath the ruins. There is a "Pit" in "The Wars of Peace," the right young man succeeds in due time in persuading the right girl to marry him, but if the main plot of the story—the trust—is defective, the romantic side is even more so; the female characters are not at all strongly drawn. The book is, however, written so smoothly that it beguiles one on to the end, and there are a few excellent male characters, who in a measure redeem the book. Again, it must be said that the author cannot be accused of preaching, for while the evils of trusts are in a measure shown forth, it is not the apparent purpose of the book to dwell at length in a didactic way on the subject. A. F. Wilson uses the industrial combination idea in an understandable way, so that the average woman reader will not find herself confused by technical expressions, which may have, in a measure, marred the enjoyment of reading "The Pit." The author of this book has excellent descriptive facilities, and it is probable that a second book will not contain the defects of plot construction and weakness of characters which somewhat mars "The Wars of Peace." [Boston: Little, Brown & Co. Price, \$1.50.]

Here is a character in American history who has already been the subject of several biographies, but who, nevertheless, deserves to be included in Appleton's series of "historic lives." It was undoubtedly due to Johnson more than to any other man that the French and Indian wars were kept in line during the French and Indian War. A man of unusual gifts, he managed to get the confidence of the Indians of the Six Nations and thereby accomplish many things for the country; but there will doubtless always be a controversy as to whether or not he was the controlling spirit in the Six Nations. The author of this biography, Augustus C. Buell, is naturally a champion of Sir William, but he seems to have written in all fairness, and the list of authorities which he has consulted in preparing the book is a long and exhaustive one. As a picture of life in the Mohawk Valley a century and a half ago, the book stands almost pre-eminent. Johnson was appointed by General Babcock to be general superintendent of Indian affairs for the whole of British North America in March, 1755, less than a month after Braddock's arrival in Hampton Roads. In July Braddock met his memorable defeat and death; a few months afterwards Sir William Johnson was a victor at Lake George, which was far-reaching as a means of rallying the spirits and restoring the confidence of the American colonies. While he did not accomplish the object of his expedition—to take Crown

Point—he inflicted a destructive defeat upon a powerful French force, which was led by one of the best generals on the French side. After Governor Shirley succeeded Braddock as commander-in-chief of the army, Sir William—who had incurred Shirley's enmity—was in due time made sole superintendent of the Six Nations, and he participated in the reduction of Fort Niagara, winning great praise. In fact, so successful was Sir William in leading his fighting Indians that he had at one time under his command 1300 redskins, "the largest force of that race that ever assembled on this continent up to that time," so the biographer tells us. And he was equally successful in dealing diplomatically with the Indians, if we except the conspiracy of Pontiac. The latter event was the first time in Sir William's twenty years experience that he was taken off his guard. With all his elaborate system of information, through scouts, traders and runners, he was taken by surprise. It was not until three years afterwards that Pontiac agreed to meet Sir William at Oswego to smoke the great calumet of peace and pledge his fealty to the King of England. After 1766 the baronet's life was one of comparative ease. He died in the harness in 1774, bequeathing his mantle to Joseph Brant. Although he never had the slightest military training in his youth he took to his army duties naturally, and General Amherst once said of him that "we can all learn something from this."

Johnson in the style of fighting we have to practice here. He lived an eventful life, and his name will ever be associated with the era of successful management of the aborigines in a time of great moment. [New York: D. Appleton & Co. Price, \$1.00 net.]

Under this title, which is furthermore expanded by these words "an exhaustive treatise on natural laws that make and maintain health and perfect physical development," we have a book of 334 pages in which Harry Bennett Wineburgh gives us the benefit of his experience. The author was awarded the prize for the best developed man in America, in Jan. 6, 1902. Mr. Wineburgh says that he was a bed-ridden cripple when eighteen, and only obtained health by the right kind of exercise. Then he soon discovered that diaphragmatic breathing was essential; next that he was eating too much, until in competition with 5139 contestants he was awarded the prize for the most perfectly developed young man in America. He pays a high tribute to the Y. M. C. A.'s of this country—which he says have done more than all other agencies to "make muscle respectable." He is writing from personal experience, and the advice which he gives is for the most part as sensible as any would wish. If he goes walking at his breakfast every morning, eats little or no meat, few if any uncooked foods, and indulges in exercises which are new to the graduate of a half-dozen gymnasium classes he may radically differ from our daily life's schedule, but who wouldn't forego many things to be in perfect health? The author has no love for physicians or druggists, and he goes rather too far in expressing his dislike for them, but in the main his book is a well-considered collection of exercises, illustrated finely, with a great deal of advice and comment thrown in. [New York: Peter Eckler.]

China collectors will welcome the volume by N. Hudson Moore with the above-named title. It will enlarge their knowledge of subjects in which they are deeply interested, and will assist them in selecting specimens of the wares of the old English potteries and factories that have passed out of existence. The volume will prove attractive also to readers who desire to know something about the choice pieces of Staffordshire ware, of which there is abundant information in this volume, which shows in illustrations many fine specimens taken from the best collections, with descriptions in the text that are fascinating as well as highly instructive. "Old Blue" is celebrated in these pages with a fullness that brings back the "good old colony times when we lived under the king," as well as the "revolutionary days and those succeeding them," when we bade good-bye forever to our sturdiest George III., and made another George the father of his country. There is a mine of historic wealth here, in both letter-press and pictures, that awakens patriotism and inspires admiration for those who fought for liberty and right on land and sea. The book is excellent, well adapted for immediate consultation, having a copious alphabetical index as well as other classified lists that will assist the searcher for intelligence on any special topic connected with Staffordshire Wedgwood, Lustre or other English pottery and porcelain. The publication is compact and handy, considering the extent of its varied details, and is handsomely bound and beautifully printed. [New York: Frederick A. Stokes Company. Price, \$2.00.]

Curious Facts.

In the experience of the larger European cities which have introduced filtration into their systems of water supply it is found that the average death rate from typhoid epidemics has diminished from one in every 2000 inhabitants to one in every 11,000. Such testimony is conclusive as to the efficacy of filtration, which, after the recent experience of Ithaca, receives, as it deserves, much more active American attention than formerly.

In Germany workmen are visited at their homes on paydays by savings bank officials to collect their savings for banking. The raising of black sheep is a hobby with John D. Wing of Millsbrook, N. Y. He has a flock of seventy, and they are perfectly black. A coat of mail against the dangers of high tension electricity has been constructed under the supervision of a German physicist, and its utility has been convincingly demonstrated in a high-tension laboratory in Berlin. The protection consists in a garment of fine close braid gauze, which envelops the body and extremities entirely, so that the current, if it should pass over the body, will only get as far as the metallic surface and be then conducted off harmlessly. Among the experiments was the touching of conductors carrying an alternating current of 10,000 volts, and causing a short circuit current of two hundred amperes, which was only perceptible to the experimenter by merely a slight sensation of warmth.

A country editor in Kansas thus neatly refers to an important domestic event in his town: "A handsome girl baby—which is not to be wondered at, considering its mother—came to Jim Brown's house and will stay until she finds a better fellow than her dad, a thing that will take her many years to do."

The latest fad in the way of a cure for dyspepsia is bread made of sea water, instead of fresh water. A Philadelphia baker makes a specialty of this bread, and the dyspeptics who use it declare that it suits them. The baker gets his sea water from Atlantic City. Eight vegetables, new to this country, are being cultivated in the Government experiment stations with reference to introducing them to the truck gardeners. They are described as follows: A European extra of giant proportions is a very valuable starch producer. From Mexico is a pepper largely used in that country, and a bush tomato, which makes delicious sweet pickles. A decorative and medicinal vine is a cucumber, also Mexican, which distributes its seeds broadly when ripe, by violently exploding. Chevreil, a sedge-like plant from Europe, produces a tuber of

hazelnut size, which, eaten raw, tastes like cocconut. The Indian basella, a vine, has blossoms like an arbutus, and fruit like a blackberry bush.

Four-fifths of the Irish immigrants arriving in New York are young women between the ages of seventeen and twenty-five. The most marvelous of all rocking stones is that of the Island of Cephalonia, off the coast of Greece. This is a great rock, about a rod square, in the edge of the sea, and it is in perpetual motion, alternately touching the land and receding from it about twenty times a minute. The regular oscillations of this natural pendulum are unaffected by calms or by tempestuous seas that break completely over it. The weight of ten persons does not perceptibly change its rate of motion, and when an English captain attempted to drag it away the oscillations snapped his chains like thread.

Fort Snelling, at the junction of the Minnesota and Mississippi rivers, will be preserved by the War Department as a national monument.

The home of Samuel Dove, an ex-slave who is more than one hundred years old, was sold recently at Utica, N. Y., under mortgage foreclosure proceedings to satisfy an indebtedness which Dove contracted to secure the free dom of his son nearly half a century ago.

The trolley car is not drawn or pushed by the electric current at all, but is lifted again and again by the attraction of magnets for the armature coils of the motor.

Notes and Queries.

IS PHYSICAL CULTURE NECESSARY?—"Marie": No doubt physical culture is of great benefit to man, but an eminent physician claims that housework is more of a benefit to man than any other form of exercise. It is a most effective remedy for insomnia and nervousness—the two evils which afflict modern women. No less a personage, we are told, than the Queen of Sweden, was ordered by her physician to spend several hours each day in the ordinary work of the house. This remedy was not prescribed until all other means known to medical science had failed to effect a cure, and the nervous condition of the Queen was such that a mental breakdown was feared. It resulted in the complete cure of one of the most difficult cases to combat—insomnia. The Queen of Sweden began the day by making up her own bed; she swept and dusted her room, prepared her own breakfast and worked in the garden for several hours. By evening the weight of her usual manual labor that she slept peacefully through the night, a result that had evaded all the remedies tried previously. If a systematic course of housework was indulged in by many women who are worn out by too much social life, late dinners and late hours, they would not have to resort to drugs to obtain natural sleep and rest.

CHERRY DE MENTHE.—"D. K.": This is manufactured from the extract or essence of mint mixed with spirits and sugar in certain proportions, and then colored with a beautiful vegetable color. Of course a great deal depends to make a fine cherry de menthe cordial on the knowledge of the manufacturer, so as to have the proportions of the essence, the sugar and the spirit in the right proportions, and to have it at least several months old, as then the several articles used bring out their best flavor and quality. Another liquor is also made from the mint which is used today in great quantities and which is called Swiss cherry. It is mostly by the French, also by the Swiss, Belgians, and in fact, all over the world, and also a good deal is used by the people of the United States. We would not advise our correspondent to acquire a taste for anything which is so near the most seductive and destructive of all stimulants.

THE ASPEN.—"Historian": According to a Scotch legend, this tree is constantly alarmed by the thought that Christ's cross was made of its wood; according to a German legend, it is frightened because, unlike all other trees, it does not bow before the Saviour. As a result of this, however, the mobility of the leaf of the aspen and other poplars due to the elasticity of the leaf stalk, which is thick and rigid at the lower end, but thin at the upper close to the leaf. Especially to trees growing in damp places, such as aspens, white poplars, etc., such mobility is of great use, as it accelerates the evaporation of the water contained in their leaves.

ANCHORS FAST AND PRESENT.—"Mariner": The ships' anchors up to the beginning of the last century consisted of a single fluke, or shank, having two comparatively short, straight arms or flukes, inclined to the shank at an angle of about forty degrees, and meeting it in a somewhat sharp point at the crown. In large anchors, the bulky wooden stock was built up of several pieces, hooped together, the whole tapering outward to the ends, especially on the aft or cable side. About the beginning of the last century, a clerk in the Plymouth (England) naval yard, finding by name, and by a certain improvement, the most important of which was making the arm curved instead of straight. At first sight this simple change may seem of little value, but consideration will show that this is not the case. The holding power of an anchor depends on two principal conditions, namely the extent of useful holding surface and the amount of vertical penetration. The latter quality is necessary on account of the nature of ordinary sea bottoms, the surface of which is generally less tenacious and resisting than the ground a short distance below. In the year 1831 chain cables began to supersede the hempen cables, with the result that the long-shanked anchors hitherto used were no longer satisfactory, and anchors with shorter shanks and with heavier and stronger crowns gradually came into use. In consequence of these changes, a commission was appointed in the year 1838 to inquire into the holding power of anchors, and a principal result of their labors was the adoption of the new result Admiralty pattern anchor, which continued to be used in the navy up to the year 1880. The invention of the steam hammer in 1842 made the rolling of heavy bars of iron, and a comparatively easy and reliable process, so that from this time onward the strength of anchors fully kept pace with that of the chain cables which had come into general use.

THE FISH IN THE GOSPEL.—"S. J.": The Galilean Sea, also called the Sea of Tiberias, abounds with various kinds of fish that constitute the chief food of the population of the towns and villages along its shores. Owing to the thick shoals in which they frequently drift along, a bark, even today, can be filled in a few minutes with the caught fishes. "And they came and filled both the ships, so that they began to sink" (Luke v. 7). The fish which, both with regard to kinds and number, is most numerous represented, is a genus of the family of eels, and are only known to us from Africa. It is the genus Chirolo, fishes in form about like the carp but with a dorsal fin provided with much longer and more numerous spines, and a ventral fin directly under the pectoral ones. There are several kinds of this fish in the sea, called the Simons, the Andreu, the Magdalene, the Tiberides, etc. Especially the last kind, of a silvery green color and with a pink ventral fin, and attaining a length of sixteen inches, is very numerous and several hundred of them can be easily caught in a few minutes. They are always to be found for sale in Tiberias, and in winter they are sent as far as Nazareth and Safed. They like to live in calm waters with muddy bottom between the aquatic plants which they feed. If they chance to be thrown into the strong current of the Jordan, which flows through the sea they are carried to the Dead Sea and their death. BROOKS.—"E. W.": They are cultivated in West Indian waters and are common. In its natural state the bath or toilet sponge is fleshy and covered with a black skin. To

MASSACHUSETTS PLOUGHMAN

TELEPHONE NO. 3707 MAIN.

Paul Revere bridge seems a worthy suggestion despite the degree to which the gentleman is already immortalized by the trolley ride.

A divorced husband who then divorces his former wife—a recently happened in London—shows a decidedly feminine tendency to insist upon having the last divorce.

It is again terribly apparent that the cheerful lightness of the French temperament is inconsistent with the most careful watchfulness in safeguarding itself against possible accidents.

Probably the Indians will begin to admit that there's some sense in anthropology now that a prominent scientist has pointed out that they have a constitutional right to celebrate the Sun Dance.

Whether or not circumstances are yet ready to explode Turkey like a big firecracker, there are moving in that direction when the killing of resident Russian officials threatens to become chronic.

Persons who are tired of arguing about the proper pronunciation of the President's name may try their tongues on Princess Arimamahini Pomare, who has just arrived in San Francisco from Tahiti.

Most of us have experienced the frame of mind of Prince Edward Albert Christian George Andrew Patrick David, prospective crown prince of England, when he said to his tutor: "I don't think I'll do 'rhythmic today. I'll go in the corner instead, if you don't mind."

Diamonds travel in queer places. Twenty-four thousand dollars worth were recently sold by the New York Customs officials because they came into the country in a flannel garment surrounding the digestion of a man who hadn't taken the Customs House into his confidence.

Recent happenings in the market have again demonstrated that gambling in stocks is one of the first and greatest temptations of the very small American capitalist. And in most cases these small investors strongly suggest the old adage concerning the respective courage of the fool and the angel.

"For soldiers," says Count von Haeseler, after a long experience in the German army, "water, coffee, and above all tea." This will please the prohibitionists, but how about the habit of having manure factored substitutes for coffee? Such testimonials as we have seen do not corroborate Count von Haeseler's observation.

A society note from an esteemed Western contemporary tells us that among other pioneers at a recent open-air festival were Misses Peacock, Goose, Crane and Crowe, accompanied by Messrs. Fox, Wolfe, Bear and Hogg. The statement will doubtless look less like a joke when we add that our contemporary in this instance is published on an Indian reservation.

How the modern American newspaper would manage to keep its readers amused without the assistance of the German "comics" is an obvious problem that will probably be solved only when the general public discovers that most of this German humor is really anything but funny. Some German humor is funny, but very little of that kind seems to get past the American editor.

It has often been remarked that a great city is more dangerous than a wild angle. The statement seems to be verified by the experience of Abdul Khadir, the lion catcher, who recently got lost in New York and nearly died of starvation. Incidentally, of course, there are those who will point out the fact that he wouldn't have got lost if he hadn't left his steamer to purchase a package of cigarettes.

We should not have been nearly so much disturbed over the statement that Tolstol had described President Harper as a barbarian if one of the professors of the Chicago University hadn't immediately rushed to the president's study and turned Count Tolstol's picture to the wall. This amusing act of retaliation is unfortunately suggestive of just the sort of thing that seems to have impressed the world-famous Russian.

Several of the New England and Middle States are in hot chase after makers of bogus foods. Connecticut and New Jersey have been remarkably active and successful in this kind of warfare, and New Hampshire has just entered the ranks with a board of health determined to take up arms against adulteration. It is believed that the frauds in food cost New Hampshire people \$1,000,000 a year.

Everybody seems perfectly willing to see a trial of Governor Bates' convict labor plan in Massachusetts. Connecticut and New Jersey have been remarkably active and successful in this kind of warfare, and New Hampshire has just entered the ranks with a board of health determined to take up arms against adulteration. It is believed that the frauds in food cost New Hampshire people \$1,000,000 a year.

The gardener who, like Mr. Harrington, sells direct to the consumer, has reduced the business to its lowest terms. He has the satisfaction, on the one hand, of complete independence from the middleman, while on the other he feels that he has a direct hold on the man to whom he does the favor of selling produce fresh from the garden. It is a pleasant, friendly arrangement all around, and nobody complaining but the middleman.

The plan of the Massachusetts State Grange in holding three field days on successive dates in different parts of the State appears to have been a success. In affairs of this kind it seems easier for the meeting to come to the farmer than for the farmer to travel the whole length of the State. By retaining the same leading speakers on each occasion the expense of the successive meetings is kept within moderate limits. The idea should be applied to all Institute meetings.

The decline in the beef market has caused postponement of several prominent enterprises for cattle farming in the Eastern States. Wholesale prices are about twenty-five per cent. below the level of a year ago. Western cattlemen say that a Dakota two-year-old steer selling for \$35 no longer ago

than last spring would be worth only \$30 now. Those who bought at the high level to fatten and sell at the prices now prevailing find the profits very unsatisfactory. The cattle-feeding business has its ups and downs, a great many of them, but the general tendency of recent years has been toward better prices and an equality of conditions East and West.

Brown eggs are still preferred in the Boston market, and it is said that the prejudice is gaining ground in New York. The whim in favor of brown eggs, yellow-meated fowls, red apples and the like, seems to be founded on the popular idea that depth and vividness of color indicate richness, and that pale shades go with lack of body, flavor and wholesomeness. The notion may be a case of association of ideas in connection with such common natural substances as water, snow, air, compared with meat, butter, artificial drinks, etc. So far as concerns eggs, there is nothing in the notion as analysis and experience have shown. In fact, the prejudice does not exist in all markets.

Some of the Western experiment stations are just beginning to talk about the Chufa nut as a novelty. It was grown in New England and elsewhere at least twenty years ago and with fair success. The little nut tubers are produced in considerable abundance and have a pleasant, sweetish taste, suggesting a combination of cocoanut and chestnut flavor. But the meat is tough and the skin rough and gritty, which qualities have prevented the nut from becoming popular for table use, and of late years it has dropped out of notice. Some now believe that the Chufa has a future, at least, as a food for hogs, etc., but it is hard to see how the nut, with its feeble, grassy top and moderate yield of tubers, could compete with the ear of corn, potato and other plants of rank growth and heavy cropping power.

Raising and Selling Vegetables.

Most of the market gardeners near Boston prefer to sell vegetables at wholesale in the city. They do not usually take the trouble to develop the local market, finding the wholesale method much less trouble. An exception to this rule is E. W. Harrington, whose thirty-one acre farm is located in the western part of Watertown. For the past six years he has been selling all his produce at retail in Watertown and vicinity, running a large produce wagon daily, loaded as shown in the illustration.

The business is evidently a profitable one, and its steady growth shows that local markets even near the larger cities are capable of supporting a retail gardener or two. Mr. Harrington began as a milk peddler and took out a few of his home-raised vegetables in the milk cart. Conditions grew less and less favorable for milk peddling. Competition increased because of milk shipped from a distance and produced under conditions of low cost. Hay and cattle feed have been very costly, and milk cows cost a great deal to buy in Brighton markets and had to be turned off for beef as soon as the milk dried up. In addition, there were losses from bad bills, etc.

On the other hand, the vegetables on the milk route brought good prices, averaging better at times than when shipped to Boston. Accordingly Mr. Harrington worked out of the milk business and built up a fruit and vegetable route as fast as he could. He was able to produce most of the truck needed on his farm, but whenever the supply gave out he would buy of his neighbors, and in order to keep the business up during the dull season in the early spring, he would sometimes buy oranges or other special lines. But the great bulk of business is in his own home-raised produce. "On the whole," said Mr. Harrington, "I like the plan better than shipping to Boston. If one has a very large business and can get a good man to drive the team and sell the load, it is very well to sell at wholesale. But it is very hard to get a good man.

"Prices are not always higher on a retail route; sometimes I have to sell for less than I could get at wholesale in Boston in order to keep up my trade. Most people will not pay above a certain price, whatever the conditions are in Boston. On the other hand, my customers keep on buying of me at a fair price, even when there is a glut in the Boston market and prices are way down there. It is hard to get a good man for a retail route. I have been fortunate in having a son who is working in the business, and takes an interest in it, handling all the money, keeping account. He takes a man with him, the team having been loaded very early in the morning, and starting out at about seven o'clock. One man gets the orders, and another does up the goods. Most of the stuff is sold in order on the same day. Very little has been engaged the day before. There are no bad bills, as my previous experience on the milk route enabled me to tell which customers are good pay and which are not.

"Besides the vegetable men, grocery men, butchers, etc., have a way of talking things over occasionally, and letting each other know who are the dead beats along their routes. Here is where a vegetable man has the advantage over the milkmen. He starts later in the day and has a chance to see other people, and find out something about new comers to town and people who are good pay, while the milkman goes very early in the morning, and has no time to talk to anybody. Of course a large part of the business is cash on delivery, but more or less credit has to be given. We sell about everything that can be raised in this climate. Just now we are taking out beans, peas, onions, cabbages, lettuce, radishes, beets and potatoes. There is something to sell every month in the year. I have several hundred pigs, and last fall I turned about one hundred of them into pork, and sold it on the vegetable route.

In a future article we will be told of the pig and pork-raising branch of Mr. Harrington's business. He is an expert in this line, and is considered very successful. At the time of the writer's visit a gang of men were using a potato spraying outfit, consisting of a barrel on a truck, and distributing a mixture with a pump and two sets of hose. This was a traveling outfit hired for the occasion, and using a patent spray mixture to kill the bugs and prevent blight. Another year Mr. Harrington thinks he will have one of the outfits, which spray four rows at once, and require only two men to operate. He thinks even a knapsack sprayer would do better work than the traveling outfit. Four men are required, one for each horse, one for the pump, and one to lead the horse. Four men each with knapsack sprayer he thought could get over the ground faster.

Potato growing is something of an experiment with Mr. Harrington, as he formerly believed land was too valuable to be used for this crop so near Boston. But the brisk demand for fresh-dug potatoes has induced him to try the crop. A great deal of hired labor is needed to carry on the business. But no special difficulty is found



A VEGETABLE FARMER'S OUTFIT.
See descriptive article.

In this line. In fact, Mr. Harrington thinks help is a little more plenty this year than last. He believes the great difficulty with farm help is the lack of steady work. Farmers wish to hire for a few months only, and then turn off a man for the rest of the year. There is no inducement for a man to deserve a steady job by good work, and the best class of men do not like to hire out in this way. Mr. Harrington arranges to have work the whole year round for his best men, the large pig-raising establishment affording a great deal of winter work. Some gardeners in the vicinity have greenhouses which provide winter work.

Reasonable Patriotism.

Some one has said that the "ism" in the coming election will no longer be imperialism or anti-imperialism, but patriotism. As wise this as it is witty. Quite long enough has the political and social pessimist been going through the land seeking whose faith he could devour. Undoubtedly there are such things as favored nations in the economy of the world, and it is highly melancholy to think that the most favored peoples do not sufficiently recognize the blessings which they enjoy. Samuel Taylor Coleridge, in the introduction to his lay sermons, calls the attention of his readers to some of the blessings which his fellow countrymen enjoy merely in their possession of British citizenship. He cites the administration of the laws, the "almost continued preaching of moral prudence"; the number and the vigor and the eminent respectability of the religious sects; the vast and regular movements of trade, and the thousand and one forces, some more or less intangible, but none the less existing and powerful, which exert their influence and finally result in the happiness and well-being of Englishmen as contrasted with many other civilized people. He adds: "Few are sufficiently aware how much reason most of us have, even as common moral lives, to thank God for being Englishmen. It would furnish ground both for humility towards Providence and for increased attachment to our country if each individual could but see and feel how large a part of his innocence he owes to his birth, breeding and residence in Great Britain."

This was a fine thought, and it is applicable with far greater force to the American citizen of today than to that of the nation for whom Coleridge wrote. Yet we hear on all sides groans and prophesies which would have us believe that things are very bad in this country! The one thing worse than a tendency to proclaim America as a failure is the disposition to assert that our country is full of fault. Our official faculty is very highly developed, and for this reason we are, perhaps, over quick to note the short-comings of the great republic. For the past four or five years certainly our press has been fairly clogged with rehearsals of our errands and strays. Meanwhile, the advantages of the American birthright have been rather too much lost sight of. The American, as a rule, is not so aware of the grand opportunities which the mere fact of his having been born in America offers him, that we can afford this state of things. We should rather dwell upon our blessings and remember, too, that the advantages of the republic are by no means confined to the native. They extend, as Sancho Panza says, not only to the citizen in the strict sense of the word, but over the domiciled alien and all within our gates.

Every avenue to fame and fortune is open to all. The American, as a rule, is not so aware of the grand opportunities which the mere fact of his having been born in America offers him, that we can afford this state of things. We should rather dwell upon our blessings and remember, too, that the advantages of the republic are by no means confined to the native. They extend, as Sancho Panza says, not only to the citizen in the strict sense of the word, but over the domiciled alien and all within our gates. Every avenue to fame and fortune is open to all. The American, as a rule, is not so aware of the grand opportunities which the mere fact of his having been born in America offers him, that we can afford this state of things. We should rather dwell upon our blessings and remember, too, that the advantages of the republic are by no means confined to the native. They extend, as Sancho Panza says, not only to the citizen in the strict sense of the word, but over the domiciled alien and all within our gates.

All this being true, it is impossible to see how any man endowed with a sense of gratitude can fail to be filled with patriotism and to feel that he owes much more than mere lip service to the maintenance in all purity and vigor of American institutions. Yet the patriotism we would encourage is not the blatant trumpery thing which so often masquerades as the real article. Rather it is the kind of love described by William Hazlitt thus: "To love one's country is to love it, to prefer its interests to our own; to oppose every measure inconsistent with its welfare, and to be ready to sacrifice ease, health and life itself in its defense. It has been called patriotism to flatter those in power at the expense of the people; to sail with the stream; to make a popular prejudice the stalking horse of ambition; to mislead first and then betray; to enrich yourself out of the public treasure; or strengthen your influence by pursuing such measures as give to the richest members of the community an opportunity of becoming richer, and to laugh at the waste of blood and the general misery which they occasion." Clear-eyed Americans will, however, distinguish between the

real article and the spurious. What we want is reasonable patriotism that with it we may dispense pessimism.

The Opposition of Mr. Washington.

The sentences of the men who disturbed the meeting at which Booker T. Washington spoke in this city seem to be just, for in two of the cases there appears to have been a premeditated attempt to make trouble. The whole affair resembled a family quarrel, where people are less reserved than they are in ordinary disagreements in which relationship does not enter. It is hard for the outsider to see why there should have been any violent opposition to Mr. Washington, whose labors seem to be in the direction of elevating the colored race of which he is so distinguished a member. True, he is not blind to the shortcomings of his people, which are not wholly their own fault, but he believes in their gradual advance along the line of least possible resistance and in adopting methods of conciliation rather than in using means of angry opposition. Many of the more aggressive negroes do not endorse this kind of effort, for they feel, and justly, too, in some instances, that they have been regarded in some quarters as brutes rather than as human beings. They say that the frequent lynching of colored men, some of whom have been innocent of all wrong, proves this, and they demand redress in no timid manner. There is no doubt that the whites have often gone beyond the limits of all reason in their treatment of those of African descent, and have taken the law into their own hands without any excuse whatever. They have usurped the place of the courts of justice, and in a frenzy of passion have burned and hanged negroes without mercy.

This, of course, makes many ignorant colored people entertain the opinion that in the eyes of their white neighbors they are no better than beasts of prey, and they are naturally belligerent and ready to oppose any measures for their improvement in which there is not a direct assertion of rights, even if this should end in a fight. The crimes of which negroes have been accused by those who appeal to lynch law are of the kind that are most repulsive and degrading, but similar ones have been frequently committed by men with not a drop of African blood in their veins. It is not the colored man's fault that he is in the South. His ancestors were brought there against their will, and if he retains some of the animal instincts of his savage progenitors, he is more to be pitied than blamed. Therefore, if we must take his life for heinous offenses, let us do it legally, and with decent restraint.

This will promote a better feeling between whites and blacks, and the latter will not be inclined to resent the efforts of men like Booker T. Washington to elevate them gradually to self-respecting and law-abiding citizenship. In the meanwhile it would be well for them to remember that a little learning is a dangerous thing, and that a flood of words does not always indicate a level head.

A Cure for Bad Sermons.

There has recently been published in England a book on "The Decadence of Preaching," in the course of which the author, Dr. Harold Ford, gives the opinion that the sermon is of transcendent importance in the religious worship. Preaching is, he considers, the "primary duty" of the clergy. The London Spectator disagrees with this statement, and reminds us that the Church of England formerly provided that if a man felt himself unable to preach a sermon he might read one to his congregation out of a book. This brings to mind the very charming grace with which Sir Roger de Coverley saw after the preaching in his parish. After being insulted with Latin and Greek at his own table he asked a friend of his at the university, we read, to find him out "a clergyman rather of plain sense than much learning, of a good aspect, a clear voice, a sociable temper, and if possible, a man that understood a little of backgammon." This man being in due time found Sir Roger took steps to make him quite comfortable. "At his first settling with me I made him a present of all the good sermons which have been printed in England, and only begged of him that every Sunday he would pronounce one of them in the pulpit. Accordingly, he has digested them into such a series that they follow one another naturally and make a continued system of practical divinity."

Addison, himself the son of an English Dean, then goes on to say that he heartily wishes more of the country clergy would follow the example of Sir Roger's rector who read his sermons, and instead of wasting their spirits in laborious compositions of their own, would endeavor to attain ability properly to enforce what has been penned by great masters. "This would not only be more easy for themselves, but more edifying to the people," he concludes. It is curious to note—that the writer in the English journal reviewing Dr. Ford's book evidently had not observed,—that Addison's endorsement of printed sermons appeared (July, 1711) in the pages of the very journal which has now (July, 1903) printed another endorsement of this cure for bad sermons. "As we read the admirable discourse the church offered once to the self-distrustful among her ministers, we can but wonder whether it might not be possible for her to return to the early epidemic," says the modern Spectator. "For our part, we think it is far better to face the fact that some excellent men cannot preach than to try to teach those who really cannot learn. Cer-

tainly, the printed sermons gave no slippish English, no disjointed arguments, no trivial anecdotes and no strings of conventional catch-words. Their moral teaching was direct and manly nor were they wanting in passages which suggest as large a charity and as true an intellectual humility as we are likely to hear from any twentieth-century pulpit."

To bring the matter home, would you not infinitely prefer, in the little country church you may be attending these summer Sundays, a sermon of Bishop Brooks or Horace Bushnell or Henry Ward Beecher well read, to the lame productions of a minister, who, though he may be a very cheery person, a very good Christian and an excellent golf player, has no gift at all for preaching? We would, and we therefore herewith endorse the Spectator's specific.

The Vanishing Cattle Trade.

The British quarantine against New England cattle still holds, although strong pressure is being used to bring it to an end.

This extreme care, which appears to cattle shippers so much like exasperating obstinacy, seems chiefly a result of the English lack of power to sense the speed and energy with which American authorities stamp out an epidemic.

Such outbreaks in England usually last a year or two, while in some countries of Europe the disease is hardly driven out at all, and the Argentine Republic has been trying in vain for many years to shake off the taint. The astonished and unbelieving position of the British authorities may be partly understood.

But another possible cause of British hesitation and delay is suggested by the rapid increase of cattle exports from Montreal, which is gaining trade at the expense of Boston and Portland. The longer the quarantine holds, the better for England's Northern colony. During the period May 1 to July 20, inclusive, 61,756 cattle were sent from Montreal, of which 29,679 head came from this country for export.

American shipping interests of various kinds are suffering severely by the change, while there must be corresponding benefit to certain lines of Canadian business. Thus English over-caution and Canadian self-interest combine to deafen British ears to all but the loudest of protests from Washington.

Life on a Ship.

The slumbers of the fore-cabin were interrupted every morning at the comparatively early hour of four o'clock, when the sun was still well under the horizon. Matutinal ablutions were usually postponed till after the early morning work, when a very tolerable bath might be obtained under a pipe which carried salt water past a warm spot in the engine room.

The cattle-men were divided into gangs, each under a lieutenant-foreman. There were 842 head of cattle on board, all hornless steers intended for the slaughter, and 108 of them were assigned to the gang which consisted of our company of three. Down the great length of the ship, the biggest of any kind which enters Boston harbor, long narrow aisles were marked by iron stanchions so arranged that, by the use of planks the vessel could be divided into skeleton pens, each capable of holding from six to a dozen cattle.

Each steer was fastened to the planking with three feet of neekrope, and ate out of a trough which ran along the floor in front of him. The muck remained in the pens and was removed at the end of the voyage by a fertilizer company, and the work of the cattle-men consisted only in providing food and clearing up the remnants of the fattening feast in the aisles afterwards. The early morning turn meant at least two hundred buckets of water drawn from the overhead water-works system. Fresh water, being a commodity of which the ocean provides little, if any, was rightly regarded by the sub-foreman as precious, and many a kindly cursing was inspired by the upset of a half-bucketful of water along the slippery iron deck. It required an hour for the watering process, and another to hoist barrels of hay from the hold, and by dint of chopping and shaking, to make them into such a breakfast as a self-respecting person would place before a steer. After the sweeping up came a period for further sleep on the sunny deck and for breakfasting.

At ten o'clock all hands gathered aft and loaded sacks of corn out of the hold and distributed their contents to the cattle, breaking each ear into two pieces. In the middle of the afternoon the watering and having processes were repeated, and the work for the day was done, except that once every four nights each had to take his turn standing four hours watch.—New York Evening Post.

Miles and the Army.

The commanding general of our army was permanently retired from active service on Saturday by the law of limitation, he having attained the age of sixty-four, and his title virtually dies with him, though it will exist for one week longer. The army General Staff measure became effective the same day. Gen. Samuel B. M. Young will be the chief of the General Staff, but not for long, for after six months service he, too, will be retired on account of the age limit, and will be succeeded in turn by General Sumner, Chaffee, MacArthur and Corbin. The retirement of all these distinguished soldiers is not far distant, but the place which they will occupy for a brief period will be, no doubt, ably filled when they lay down the cares of military office.

Many will, no doubt, regret that the title of commanding general has disappeared, and that the senior officer of the army will no longer bear it, but there seems to be good reason for the change, and it is in the direction of common sense, for it will prevent all clashing between the head of the national government and the foremost officer in the army. The leading military position will now be of a character that will promote harmony and prevent unseemly discussion. The army General Staff measure formulated by Secretary Root was not adopted without much opposition, but now that the provisional staff has given away to a permanent organization, it is to be hoped that some eminently practical results will be reached in the conduct of the army.

General Miles was a brave and efficient officer who was, perhaps, not always discreet in the expression of his opinions, the result, no doubt, of his lack of West Point training in his youth. It is to his credit that he attained to the dignity of lieutenant-general without a specific military education in the years when the mind is most receptive, but his confidence which enabled him to win the position also made him too pertinacious, if not pugnacious, in the expression of his ideas. He was a courageous fighter, and his farewell to the army is a manly and patriotic one. He has the good wishes of the whole country in his honorable retirement.

Points of Wool.

In judging wool, the following points are of importance:

Softness is essential in good fleeces, and the want of it is most conspicuously noticed, if it is wanting, by examining the wool on the neck. These fleeces are best which, after growing to the end of the staple of the wool, attracts the dust and gives the outside of the fleece when on the sheep a darkish dirty appearance. This oily matter is of service in hastening the growth of the fleece, and imparting softness, elasticity and strength to the wool.

Soundness, or strength of fibre, is an indispensable quality in wool. A want of this invariably reveals itself along the ridge of the back, where there is a sort of division between the wool of each side. To test it pull a lock or staple from this part, hold one end in each hand, and give it a strong, steady pull. If the strands break, the whole fleece is lacking in soundness. This want of soundness is generally caused by bad feeding.

Fullness means the closeness with which the locks of wool grow together. Before opening the fleeces of sheep possessing the quality in perfection, only a fine thin line of skin will be seen around each lock of wool. If defective, the space between the locks will be larger.

Freedom implies that the individual locks of wool, as also their individual fibres, are not entangled, but perfectly separate and distinct. The wool on being opened in a well-bred sheep should fall apart under the hands clear and unbroken. A want of freedom will show most plainly along the ridge of the back.

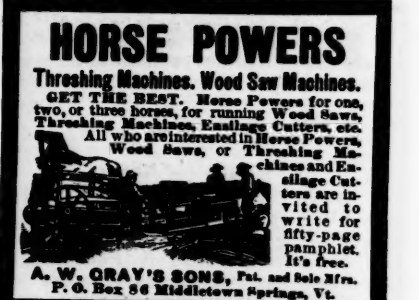
Pasture is like killing an ox for his liver: soiling is the saving and using of the entire animal. The animal on pasture has one mouth to eat and four feet to tramp. In dry weather the grass is pulled out by the root; in wet weather it is tramped into the mud.—J. D. Dietrich, Wyoming County, Pa.



A PENNY SAVED IS A PENNY EARNED

WHEN about to buy a WINDMILL, TANK, TOWER, PUMP, GASOLINE ENGINE, or GALVANIZED PIPE, write us for our price. We also make special offers at times. We have one now called offer No. 7.

Smith & Thayer Co.
236 Congress St. BOSTON



Wanted at Harris Farm, North Scituate, R. I. Two single men to work in dairy, one to assist manager. Americans preferred. Must be milkers with good habits. Accommodations are first-class, also liberal wages are paid to worthy men. HENRY F. SMITH.

Canada Unleached Hardwood Ashes

The best, cheapest and most lasting fertilizer in the world. Now is the time to plow up your old meadows and re-seed them using wood ashes as a fertilizer, which will ensure you a good crop of hay for years. Joyn's Ashes mean quality. You get them as they are collected from house to house. Write for prices delivered at your depot and address.

JOHN JOYNT,
Luskow, Ontario, Canada.
Reference—Dominion Bank, Wingham, Ont.



YORKSHIRE SWINE PIGS

For store and breeding purposes by
W. W. RAWSON,
ARLINGTON, MASS. and NEWTON, N. H.

SIMPLEX CALF FEEDER

The only practical Calf Feeder. The only sensible method of raising calves. No more "calf sickness." Prevents scours. Adds to the value of the calf, whether intended for the dairy or for meat. Price of Feeder, \$1.50. Postpaid. Agents wanted. Booklet free. Mention this paper.

MOSELEY & FRITCHARD MFG. CO.,
Dept. 1. Farmington, Conn.

Water Lifting PUMPS.

We have but to know your needs to give you the highest service in
Hand, Power and Steam.
All kinds for all purposes (including Spray Pumps) will be supplied at lowest cost. Let us suggest and estimate for you on anything that pertains to water raising. Please Catalogue Free.
Charles J. Jager Co., 174 High St., Boston, Mass.

Our Homes.

The Workbox.

LADIES' KNITTED UNDERWEAR.
Procure 4 skeins of white two-thread Saxony yarn, 1 pair bone needles No. 1, 1 pair steel needles No. 15, 1 fine steel crochet hook. With steel needles cast on 128 stitches, and knit 1 stitch plain and purl 1 alternately till you have finished 1½ inches, keeping the ribs correct.

Now put in bone needles and knit 2 plain and purl 2 for 12 inches more. Go back to steel needles and knit 1 plain and purl 1 alternately for 1 inch. Back to bone needles and knit 2 plain, purl 2 alternately for five inches.

To shape the armholes, decrease 1 stitch each end of needle, every other row, until there are 100 stitches on the needle. Rib 2 and 2 for 10 stitches each end of shoulders, and bind off intervening stitches for neck. Knit shoulder pieces to a depth of eight inches.

Back—Cast 80 stitches with bone needles between the two shoulder pieces and rib 2 and 2 for 1½ inches. Increase one stitch each end of needle every other row until there are 128 stitches on the needle. Rib 2 and 2 for five inches.

With steel needles rib 1 and 1 for four inches.

With bone needles rib 2 and 2 for 12 inches. Then with steel needles rib 1 and 1 for 1½ inches and bind off.

If you wish sleeves, with the bone needles cast on 92 stitches, rib 2 and 2 and decrease 1 stitch each end of needle every other row until there are 76 stitches on the needle; change to steel needles and rib 1 and 1 for 1½ inches and bind off. Sew up under-arm seam and sew in sleeves.

A simple shell edge may finish the arm size if preferred.

Around neck crochet a row of holes, to run ribbon in, finish this with a pilot shell. Silk may be used for the crocheting.

EVA M. NILES.

Facts about Oyster Farms.

"How We Are Fed," by James Franklin Chamberlain (the Macmillan Company), is a book for children, but contains much information that would be unfamiliar to most adult readers, one particularly interesting chapter being on oyster farming.

Oyster farms, says Mr. Chamberlain, are far more profitable than are those upon which corn and wheat are raised. This is a very old industry in our country, but it is very old in some parts of the world. As long ago as the seventh century a Roman knight raised oysters for the market, and it is said that the business made him very wealthy.

Except for the first few days of their lives oysters are prisoners, being attached to rocks, to the shells of their dead relatives and to other objects. They grow in immense numbers, and crowd one another so that many of them die in the crowded houses. In fact, most of them are soon crowded out and die.

Oyster beds are not found in very deep water, but rather along the shore, generally near the mouth of some river. The oysters often live where they are uncovered when the tide goes out, and on this account, partly, man has used them for food for ages. When the Pilgrim Fathers landed on the shores of New England they found that the Indians used oysters very commonly, and all along the coast were great heaps of shells. At the very first Thanksgiving dinner given in America oysters were served.

In a single year an oyster will produce more than a million young ones. The young oysters are called spat, and most of them are drifted away by waves and currents or devoured by larger sea animals.

Oysters used to be so plentiful on the natural beds that they were very cheap, but by gathering them at all times of the year, so that they had no chance to produce their young, as well as by the catching of the young themselves, many of the natural beds were destroyed, in order to keep up the supply of this food men began oyster farming.

The oyster farmer prepares his farm in various ways. He places clean oyster shells, stones, trays, bundles of sticks and other things on the bottom, so that the oysters may find something to which to attach themselves. Then he places the young oysters, or spat, on these objects. When trays are used, several are placed, one upon another, and bound together by means of a chain. The trays are taken up from time to time, in order to gather the oysters that are ready for market. Sometimes stakes are planted in a somewhat circular form, cords are attached to the stakes, and bundles of sticks are fastened to the cords in such a way as to keep them a little above the bottom. Young oysters attach themselves to these sticks, which may be drawn up when the proper time comes.

Oysters grow at very different rates. In two years they may grow to be six inches in length, or it may take them several years to reach that size. They grow most rapidly on the artificial beds, and are also of a better quality than on the natural.

The starfish is one of the greatest enemies of the oyster, large numbers of which it destroys every year.

"Babies Checked Here."

Two enterprising girls who wanted to earn money this season and have a summer outing at the same time thought up a clever scheme and are making it pay beyond their wildest expectations, although they have been established but two weeks.

Both of them know something about kindergarten work and are fond of children so they rented a large tent, pitched it on the sands at a popular resort along with the snake ringer, the fat woman, the toy railroad and the rest of the side shows. They had no flooring put in the tent, but made it attractive with festoons of seaweed, kelp and shells. On the sand they spread a heavy rug or two, heaps of pillows and hassocks covered with gay, wash cases, added two small bamboo screens, behind which are concealed more pillows on rugs, and in two great trunks they keep all the rest of the accessories necessary to their enterprise.

These are a quantity of small tin pails, toy hoops and spades, building blocks, cardboard, bright wools, blunt needles, highly colored tissue papers, a fine assortment of beads of all sizes and bouncing balls.

Then they hung out their sign, "Day Nursery." Patrons began flocking as to a lunch counter.

Parents going for a sail checked their whole family; mothers ready for the morning dip deposited the baby with many injunctions; fathers tired of answering "What for?" took their troublesome charges to the tent shelter; giddy young aunts going fishing with their "steadies" took little nieces and nephews to leave, and all received checks for the little ones left.

Now, when fond parents want to go off

for the day they take Johnnie, Susie, the twins and the baby to be cared for and fed until the sun goes down.

Often fifteen or twenty children are at the nursery during the greater part of the morning, and a charming sight it is. The attraction fairly overflows the side show.

Behind the blue screen lies a fat cherub gurgling over a string of smooth shells, and just ready to drop off into dreamland. Behind the green screen under a bit of mosquito netting slumbers a dimpled darling hugging her bottle.

Out in the great tent all the little Mollies and Jimmies who have never met until today are engaged in excavations in the white sand which threatens to undermine the centre pole, or in digging dry wells or building pyramids. Around the gentle guardian the taller children are grouped pricking cards, outlining thereon in bright colored worsted circles, squares, birds, beasts and fishes, such as were never seen on land nor sea. All must "play nicely," be polite, and are conscientiously "minded" by these caretakers.

Outside the tent, under other chaperonage, the small charges are watched while they wade or play at catching the tiny ripples which roll in shoreward, and inone are permitted to stray out of sight or hearing.

When the children are scattered about at play, the day nursery looks like a baby orphan asylum on a holiday jaunt, and every woman stops to exclaim: "Ain't they too cute for anything?" and to ask questions.

"We are doing more business than the snake charmer," said one of the pretty proprietors yesterday. "We are not only making all our expenses, but will have a big surplus at the end of the season. We shall stay as long as the crowds do. Some of the same children come every day. The mothers know they are taken better care of than by nurses, for we direct their amusements, correct their speech, and give them a constant change of occupation, so they do not get restless and fret. The tent is better for them than so much hot sun."

"Yes, we furnish them luncheon when desired: fruit, milk, bread—whatever they are accustomed to eating."

"Do they ever quarrel?" asked a curious observer, noting an inopportune struggle over a hoe.

"Oh, no," replied the fair caretaker, unconsciously dispossessing a sowing two-year-old of the implement in contention and replacing it with a brilliantly red shovel, which at once distracted his attention. "They are much good children, not one of them whining or crying; I suppose mothers would not leave really peevish or half-sick little ones with us. We are very careful that they are all bright and strong children. It is great fun—and so profitable."—Los Angeles Times.

To Strengthen the Eyes.

That there should be special exercises, athletics, if you will, for the eyes, is perhaps a novel idea to many. But it is said that one way to strengthen the eyes is to turn them alternately upward and downward as far as possible twenty times in succession. Do this slowly.

Next turn the eyes on the level from right to left, repeating as before. Turn them to the upper left corner, and then to the lower right corner. Then alternate the motion from the upper right corner to the lower left corner, and repeat.

Conclude these exercises by rolling the eyes around, first to the right, then to the left, in the extreme limit of the muscular extensions. Be very careful when performing the exercise not to strain the muscles.

The eyes should be bathed every night before retiring to remove any dust that might have gathered on the lids during the day. Cold water should be used, although lukewarm water is good occasionally.

Open the lids and let the water bathe the eyeballs. Wipe them with a soft towel, taking care to rub toward the nose. This motion has a tendency to remove any foreign matter.

To preserve the round shape of the eyeballs occasionally rub them gently, and always toward the nose. As one grows older the eyeballs have a tendency to become flat. Gentle rubbing or massage helps to preserve their shape.

If the lids are inflamed by cold or study a little rose water is good for bathing them. Cold weak tea, weak salt water and warm milk are also good for occasional use. The milk should be diluted with water.

Bathing with equal parts of witch hazel and water is very restful to the eyes. Another plan is to bathe the eyes with warm water in which are dissolved a pinch of powdered borax and two or three drops of spirits of camphor.

A soft linen cloth which is employed for no other purpose is better to use when bathing the eyes than a sponge.

The eyes should never be used when they are tired or weak from illness, nor should they be exposed to a strong light at any time. The light should always fall on the work or book from over the left shoulder.

The creams used for the complexion are bad for the eyes and should never be applied. On no account should the eyes be touched with lotions or ointments except under the supervision of an oculist. The sensitiveness of these organs is so great that they resent this slightest maltreatment.

To stimulate the brilliancy of the eyes by the application of belladonna is certain to do injury. The Eastern custom of darkening the inside of the eyelids and eyelashes with powdered kohl is not unknown in this country. Moore, in "Lalla Rookh," represents the women of the harem in the performance of the various operations of their toilet, as mixing:

The Kohl's jetty dye.
To give that long, dark language to the eye
Which makes the maids, whom kings are proud to
cull.
From fair Circassia's vales, so beautiful.

No Eastern woman consents herself completely dressed till she has tinged her hair and the edges of her eyelids with the powder of lead ore. The operation is performed by dipping into the powder a small wooden bodkin of the thickness of a quill, and then drawing it through the eyelids over the ball of the eye.

That is what the prophet Jeremiah means when he speaks of rendering the eyes with painting. The original words regarding Jeremiah painting her face are: "She adjusted her eyes with the powder of the lead ore."

Another reason against the practice of painting the eyes which should appeal to every woman, is that the paint in time makes the flesh around the eye wrinkled.—New York Sun.

A woman who has succeeded in reducing the flesh about her waist to artistic proportions recommends this as an exercise: Lie flat on the back upon the floor. Fold the arms and rise to a sitting posture. Then lie down again and raise one leg as high as possible, then the other. Repeat each movement morning and evening until tired.

Summer Hygiene.

Summer is the season of health and recreation for those who properly regulate their mode of living. For those who do not it is a season of discomfort.

Pure, healthful, light food that will not stimulate heat production while it properly nourishes and strengthens the body and brain is the great essential.

It is conceded that the best of all foods for summer diet are the quickly made four foods—hot blanchet, rolls, puddings, cakes, muffins, etc., such as are made with baking powder. A most excellent household bread is also made with baking powder instead of yeast. These, properly made, are light, sweet, fine flavored, easily digested, nutritious and wholesome. Yeast bread should be avoided wherever possible in summer, as the yeast germ is almost certain in hot weather to ferment in the stomach and cause trouble. The Royal Baking Powder foods are unfettered and may be eaten in their most delicious state, viz., fresh and hot, without fear of unpleasant results.

Alum baking powder should be avoided at all times. They make the food less digestible. When the system is relaxed by summer heat their danger is heightened.

The four-foods made with Royal Baking Powder are the same of perfection for summer diet. No decomposition takes place in their dough, the nutritive qualities of the flour are preserved and digestion is aided, which is not the case with yeast-bread or cakes.

Fat People and Prepiration.

Fat people are less able to resist the attacks of disease or the shock of injuries and operations than the moderately thin. In ordinary everyday life they are at a decided disadvantage. Their respiratory muscles cannot so easily act. Their heart is often handicapped by the deposit on it, and the least exertion throws them into a perspiration. This last fact is curiously misunderstood. It is almost universally looked upon as an actual "melting" of the subcutaneous fat and is considered to be nature's method of getting rid of the superfluous.

But this is not correct, for in spite of its greasy appearance sweat only contains a trace of fatty matter, rarely more than .01 per cent, and this comes of course from the cells of the sudoriferous glands and primarily from certain constituents in the blood. A person whose limbs and body are covered with adipose tissue is in the position of a man carrying a heavy burden and too warmly clothed. —London Hospital.

Value of Apples.

As the apple in prime condition will soon be here again, it is well to remember, says the Cooking Club, that this fruit contains a larger percentage of phosphorus than any other fruit or vegetable. This phosphorus is admirably adapted for renewing the essential nervous matter of the brain. The acids are also of great value for people of sedentary habits whose livers are sluggish in action, these acids serving to eliminate from the body noxious matters, which if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions. Some such experience must have led to the custom of using apple sauce with roast pork and similar dishes. The malic acid of ripe apples, either raw or cooked, neutralizes any excess of alkali matter engendered by eating too much. Apples are useful as a disinfectant for the system, and have considerable value as an antidote for tobacco and liquor. Under all conditions and in all cases there is no fruit so beneficial or harmless as the apple.

Domestic Hints.

BOILED FROGS.

Select eighteen or twenty good-sized, fine, fresh frogs, pare off the feet neatly, then lay the frogs on a dish, and pour two tablespoonsful of sweet oil over, season with a pinch of salt and a pinch of pepper, and squeeze in the juice of a fresh lemon. Roll them around several times in their seasoning, then place them nicely on the broiler, and broil them for four minutes on each side. Take them off, dress them on a hot platter, and garnish with a maître d'hôtel butter, and send to the table.

SUCKING FIG, A LA FRANCAISE.

To make the stuffing fry a minced onion in some fat, throw in a spoonful of sage, then a quantity of finely minced breadcrumbs and ladleful of broth to moisten. Stir around in the frying-pan until well mixed, season with salt and pepper, stuff the pig with it and roast it in the oven. When barely done take the pig and cut it in pieces of the right size to serve, put them in a broad saucepan and pour in Spanish sauce to nearly cover, put a lid on and stew slowly. Make up the stuffing from the cooked pig into small balls, bread and fry them; serve one such forcemeat ball in each dish with the meat and sauce.

PRUNE TART.

Mix 1½ cups of flour and half a cu. of sugar. With the tips of the fingers work in two-thirds of a cup of butter and make to a stiff dough with the yolks of three eggs, more or less according to size. Flour well a deep pudding pan. Break off small portions of dough, pat into the form of a round, and press the bottom and sides of the pan until it is entirely covered. Brush with white egg and stand aside to chill while preparing the fruit. Wash and stone some fresh prunes, add sugar to sweeten well and a rounding tablespoonful of flour for each quart of fruit. Fill the pastry about two-thirds full and bake in a moderate oven. When about done beat the yolks of three eggs with a stiff froth, add three rounding tablespoonsful of sugar and vanilla to flavor. Pile irregularly over the top and bake slowly until firm to the touch.—What to Eat.

ROYAL LEMON SAUCE.

In a granite saucepan mix half a cup of sugar, a level tablespoonful of cornstarch, a fourth of a cup of seeded raisins, a tablespoonful of shredded citron, and a dozen blanched and chopped almonds. Add gradually one and a quarter cups of boiling water and boil for five minutes, stirring constantly; then stir in a little of the grated rind and the juice of half a lemon.—Good Housekeeping.

CHICKEN MOUSSE.

Remove all the meat from a cold cooked chicken and cook the carcass in a very little water, putting in an onion and some parsley to flavor it. Chop the meat, when freed from skin, and then pound it to a paste, adding about a quarter of a quantity of cold cream. Season with salt, white pepper and a very little mace, and moisten with the stock in which the carcass was boiled. Add then a gill of cream very stiffly whipped. Put a layer of this mixture into a charlotte mould, then a layer of cubes of jelly, and so on, until the mould is full. Let the mould stand for two or three hours and unmould when serving. Garnish with parsley and slices of onion.—The Epicure.

CHILI SAUCE.

For chili sauce use ripe tomatoes. To each eighteen small cups of vinegar, one cupful of sugar, chopped green peppers enough to make one cupful, three onions chopped fine, two tablespoonsful of mixed ground spices—doves, allspice and cinnamon. Boil all together until a rich sauce is formed and the flavors are so well blended that no one is especially distinguished from the rest. Pack in small jars and store in a cool place.

Hints to Housekeepers.

In preparing shrimp for salad, take out the intestinal vein, running down the back of the shrimp, and remove any shells which may adhere. Pour boiling water over the shrimps and let stand for five minutes, then drain and cool.

Brussels soup is a famous French broth thickened with vegetables, and is easily made. It is a real stock in the house. Peel and cut into small squares three medium-sized young summer carrots, one young turnip, half an onion and two leeks. Simmer the vegetables with each layer with a layer of sliced onion and real stock. Season the whole with salt and pepper and let simmer for three-quarters of an hour. Then chop well one head of lettuce, a handful of sorrel, a few branches of chervil and the same amount of parsley, and add them to the soup. Eighteen minutes before serving add also a cupful of well-washed rice and let it boil until the soup is required. This is one of the best August soups, the chopped herbs adding a grateful touch of green to it. Instead of rice a slice of toasted bread may be served with each plateful, if preferred.

The most attractive ways of preparing potatoes for salad is to cut them into little round balls with a potato cutter, and then boil or steam them until tender. Use equal parts of potato balls and celery cut into cubes, with French or mayonnaise dressing or both, i. e., marinated with the former and served with the latter.

For green tomato soy green tomatoes into thin slices. Then place in a stone jar, alternating each layer with a layer of sliced onion and a sprinkling of salt, allowing one dozen onions to a peck of tomatoes. Let stand overnight, and in the morning drain off all liquor and place in the preserving kettle. Add 1½ ounces of black pepper, one ounce whole allspice, one ounce mustard seed, and one-fourth pound of ground mustard mixed to a paste with a little vinegar. Pour in vinegar enough to cover and let them simmer until thoroughly soft and well blended. Pack in glass jars and let them stand for six weeks before using.

If the hands perspire freely, powder them with any good talcum powder, and there will be little danger of injuring the gloves.

"Ball throwing" I do not advise at any great extent for girls," says Dr. Luther Gulick, physical director of the public schools of New York. It makes the clavicle prominent and destroys the symmetry of the neck, a fact every girl is likely to regret when she is older and begins to wear evening gowns."

Fashion Notes.

French women are using this season bathing suits of light-weight cloth in a fine quality. It has been discovered that this material, unlike the heavy, dark, heavy flannel, does not weight itself with water so quickly and stands salt-water wear much better than they in several ways. Some of the new models in bathing suits show a princess effect, and others are little low-necked empire gowns that are very smart out of the water, but rather more difficult to manage in the breakers than a design that is secured at the waist line. White and green is a much seen combination for these beach costumes, and nothing could be more artistic in effect. Cherry and scarlet bathing of trimming are used, too, and are becoming dark-green and dark-haird women, particularly if a red silk handkerchief is knotted over the hair.

"The shops at the moment are full of tempting midsummer bargains and are well worth the attention of prudent buyers. Good summer materials, like taffetas, foulards and Indian volles, etamines, batistes, dimities, and lawns are now to be picked up literally at half price. Irish dimities of exquisite fineness and fast color, in reference to the fact that for thirty cents the yard at the beginning of the season could be got now, by looking for them, for fifteen and eighteen cents the yard. Fine lawns and organdies, too, have dropped from twenty-five to ten cents the yard, and are becoming a single dress pattern of these fine desirable goods which will be found among a considerable assortment of much less satisfactory offerings. A trip to New York and a round among the good shops will well repay the out-of-town woman in the genuine bargains which she will find.

"A pretty yachting suit has a skirt and short sack coat of white cloth-finished flannel trimmed with bands of white taffeta striped diagonally with black velvet ribbon. The same trimming edges the short coat and the deep sailor collar and the cuffs. The skirt is made of the same material, with an inset above the hem of gathered. With this is worn a white silk blouse, cut half low at the throat, and elbow sleeves. With the coat discarded the blouse makes a pretty dinner toilette for the cruise.

"The yoke design appears in many of the models for new fall shirt waists. In a few it extends over the shoulder, but this, according to good authority, is not considered to be really good style for the tailored waist, and the tailored idea will certainly predominate in these waists this autumn. The improvements in the make and design of the shirt promote the material almost to first choice for fall shirt waists. It is shown in solid colors, in stripes, and in charming overland designs. Striped washed flannels will also be used, and for early fall wear the medium-weight cotton vesting will be in demand.

"The demand for veils shows no sign of decreasing, and new styles of these dainty accessories are constantly being imported. A heavy chiffon veil which is new is edged with a wide band of liberty silk ribbon in solid color. This veil is shown in white and light tones, and can be had, too, for driving and yachting in the more serviceable blue, brown and green shades. Other new chiffon veils have a self border of Mexican hand-drawn medallions, which is carried over the crown of the head and down to a considerable length.

"Linen launders well, but it muzzes very easily and is, therefore, by no means economical wear. A smart white linen toilette is in two pieces. The slightly flared skirt is of the five-yard model, with an inset above the hem of a three-inch band of embroidery done on linen. The three-quarter length coat has a similar band around its skirt, set perhaps two inches above the hem. A deep-pinked cap and a matching jacket are also shown. The jacket is of a three-quarter length coat with a second collar of embroidery a size smaller falling over the first. The sleeves drop from the elbow with an inset of embroidery, and are gathered into a long-pointed cuff of embroidery at the wrist.

"These included ready-made summer suits as well as the materials in the piece. In choosing a marked-down costume it is advisable to select one that is made in not too pronounced style. Suits, for example, whose skirt has the long, many-gored correct coat are not good value even at a low price unless they are to receive the constant wear that will finish them this season. It is quite easy now to pay a small sum for thoroughly good costumes and dresses of a style and make that will permit their adaptation to the fashions of another season, but they must be sought for with care.

"New Paris lingerie shows not so much new designs in the garments as improved finish and even more exquisitely fine fabrics and trimmings than have been seen. The well-dressed woman understands the necessity of perfect fitting undergarments to insure perfect-fitting gowns. The stout woman knows that her size is considerably increased by too much amplitude in undergarments, and that the well-dressed woman, by cutting a flannel petticoat is worn in the autumn and winter, it is gored and finished at the top by the narrowest of binding, and is made so large that it drops below the waist line or below the books that are placed on the corset to keep down any fullness of clothing. To get the necessary width in these narrow petticoats an attached flounce is put across the back breadth. This is trimmed with narrow lace-edged ruffles which extend around the entire skirt. Some women dispense with the flannel underskirt altogether, wearing instead in cold weather perfect-fitting satin knickerbockers lined with flannel.

"Handkerchiefs are used not only for corset covers but to trim full sets of underwear. Cambric petticoats are handkerchiefs ruffled made by cutting the square diagonally into two pieces and setting the pieces tip to tip around the skirt.

skirt. The same trimming is applied to the corsege of chemises and corset covers, half of the handkerchief being set on the front and half on the back. To get the required fullness, as well as to add to the decorative effect, a strip of insertion is let in the centre of the handkerchief over the corsege.

"Some attractive crash gowns are to be seen this summer on smartly dressed women. It is a matter for congratulation that this material is not popular this year in the sense of being common. Cheap toilettes in crash are intolerable. The material is heavy and saggy, and unless cut by a first-class dressmaker makes up very badly. A French morning toilette seen at Newport the other day was of crash, the full skirt having a band of wool embroidery in Oriental tones, let in about two inches above the hem. The bodice has the long shoulder effect, produced in a sort of crepe bretelles that come down over the slightly loose full front and cross over to slip one end under the belt at the left side, the whole trimmed with a narrow band of the embroidery. It must be added that toilettes of these coarse crashes are not practical for moderate purses. They lose shape readily, and some other similar material, lines of coarse weave or a fine duck, is a better choice. White pique for smart wear is not in favor this summer.

"Charming little taffeta shoulder wraps are seen for midsummer wear which are enough like the periwinkles of our grandmothers' young days to have come from the old trunk in the attic. Glace taffeta is used to make these little wraps; their trimming following the old style in the tiny pinked ruchings that cover them. The long, pointed ends of these periwinkles are crossed in front and carried around to the back, ending at the waist line under a rosette. They are seen in black, white and other solid colors. One in a delicate mauve was effectively worn with a silk muslin, on whose cream ground was wrought a spraying design of small flowers and leaves in mauve tint. "We must wear the periwinkle carefully," says the Queen, writing of this little wrap. "It needs a great deal of putting on. It is more becoming if pointed at the back of the waist, a fact to be borne in mind by those who are not slender. It is being made in gauze and lace, sometimes embroidered in silk or ribbons, and many examples have shaded fringes. Some end in a basque with a big buckle, some are set in a yoke piece; but English women are inclined to wear them as becoming adjuncts to the rest of the toilet and not as a very important vesture. The stole ends that accompany some of them make a pretty finish to a gown, and without doubt they are leading the way to the early Victorian drape shaped to the shoulders and cut in one with the bodice. Boleros combined with tipsters and periwinkles will by and by emancipate themselves as time goes on and each assert its own individuality."

"A beautiful evening wrap for midsummer wear is of gray mousseline de soie plaited, the sleeves and the edge of the loose coat inset with black Chantilly. The drooping cape effect is shown in the deep collar attached, which falls low over the shoulders and is trimmed with the Chantilly lace and edged all round with tiny white roses.—New York Evening Post.

The World Beautiful.

Lillian Whiting, in Boston Budget.

"But real action is in silent moments. The eye of our life is not in the visible facts of our choice of a calling, our marriage, our selection of an office, and the like, but in a silent thought by the wayside as we walk; in a thought which revises our entire manner of life, and says, 'Thus hast thou done, but it was better thus.' I desire not to disagree with you, but the fact that I am here certainly shows me that the soul has need of an organ here. Shall I not assume the post? Shall I skulk and dodge and duck with my unreasoning apologies and vain modesty, and imagine my being here impermanent? Less pertinent than Epaminondas, or Homer being there? and that the soul did not know its own needs? Besides, without any reasoning on the matter, I have no discontent. The good soul nourishes me, and unlocks new magazines of power and enjoyment to me every day. I will not meanly decline the immensity of good, because I have heard that it has come to others in another shape."—Emerson.

"If the real action of life is in silent moments the real success, the true effectiveness of life is in a certain mental fidelity to the thought which 'comes by the wayside as we walk'; which revises, indeed, our entire manner of life, if it is recognized and utilized. Perhaps the one most determining difference between success and failure lies in the power to carry out the thought; to fulfill the purpose, that falls upon one, or which reveals itself to one, in a silent moment, or to ignore and forget it, or tolegate it to the realm of the impossible. As a matter of actual truth, nothing is impossible; any conceivable achievement or accomplishment is only a question of time and of persistence of energy. 'Let the great currents of belief run gradually into a deeper channel,' said Frederic W. H. Myers. 'Let men realize that their most comprehensive duty, in this, or other worlds, is intensity of spiritual life; nay, that their own spirits are co-operative elements in the cosmic evolution; are part and parcel of the ultimate vitalizing power.'"

In my view, then, each man is essentially a spirit, controlling an organism which is itself a complex of lower and smaller lives. The spirit's control is not uniform throughout the organism, nor in all phases of organic life. In waking life it controls mainly the centres of supraliminal thought and feeling, exercising little control over deeper centres, which have been educated into a routine sufficient for common needs. But in subliminal states—trance and the like—the supraliminal processes are inhibited, and the lower organic centres are retained more directly under the spirit's control. As you get into the profounder part of man's being, you get nearer to the source of his human vitality. You get thus into a region of essentially greater responsiveness to spiritual appeal than is offered by the superficial stratum which has been shaped and hardened by external needs into a definite adaptation to the earthly environment. 'That highest manifestation of power which is called genius is but the conscious utilization of the wider range of faculties—the more intense and concentrated form of energy brought to bear upon affairs. A signal instance of the practical value of recognizing the silent thought by the wayside is in the present development of Marconi's conception of a new means of communication for the world in wireless telegraphy. "Consider," said President Eliot of Harvard recently, "the imagination which resulted in the transmission of thought over a distance of three thousand miles without any visible means of connection!" A recent scientific paper commenting on Marconi's achievement, says: "That accomplishment by Marconi is the most wonderful achievement which has taken place in the past fifty years, and which shall doubt the future of the system which he is building up for the accomplishment of commercial business in all parts of the world. Wireless telegraphy is not a dream; it is not a vision of the electrical enthusiast. It is a most positive, present-day accomplishment of the most tremendous importance."

And again we read:—"Marconi's triumphs almost make us believe in the magical powers of science; yet, just as we have come to understand the Morse telegraph, the Bell telephone and the Edison electric light, we shall come to see Marconi building up the very day, matter-of-fact method of communication between distant places."

"Present-day progress is not better illustrated than in the advances which Marconi

has made. Within the space of nine years he has developed a new and great enterprise, whose operations today could not have been believed by the most visionary enthusiast a decade ago. Even two years ago the idea of linking the hemispheres by wireless messages would have been ridiculed. We have been taught to be chary of our disbeliefs. It is no longer possible to doubt that transatlantic wireless telegraphy is possible, for the thing is done every day between England and Canada. It is reasonable to doubt, then, that commercial transatlantic wireless between this country and Europe will shortly be brought about? When men like Lord Kelvin, Thomas A. Edison, Professor Pupin, Andrew Carnegie and hosts of other leading scientists proclaim their faith in Marconi's work and the great commercial success to result from it, we must recognize the authority and value of their beliefs.

"The most potent fact of the present status of wireless telegraphy is that it is on the eve of wonderful commercial reward. Marconi, himself, has successfully gone through three great stages of endeavor—discovery, invention and development. The real motor of human progress is revealed in these silent moments. The great inventions of the world are suggested, and the ideas that develop humanity fall upon one in these silent moments whose power revises the entire manner of life. The Brunswick, Boston.

Gems of Thought.

"We often do more good by our sympathy than by our labors."

"It is well to do our work as to God, a blessed privilege to do that whatever we do we may do to Him; but it is blessed also to have a day for communion with Him in which we need not work.—James Hinton.

"Nothing but infinite pity is sufficient for the infinite paths of human life.—Oliphant.

"Christians, a wise man has said, is 'for use, or it is nothing.' It means the deepest life of goodness in the heart.—Alexander Gordon.

The Horse.

High-Speed Mares.

The first trotter to beat 2.30 was a mare, and the gradual reduction in the mare's record from that day to the present is shown by the following list in the Horse Review: Lady Suffolk, at twelve years of age, in 1845, 2.39; Highland Maid, at six years, in 1853, 2.27; Flora Temple, at fourteen years of age, in 1859, 2.19; American Girl, at seven years, in 1868, 2.14; Goldsmith Maid, at seventeen years, in 1874, 2.14; Maud S., at eleven years, in 1885, 2.03; Sunol, at five years, in 1891, 2.03; Nancy Hanks, at six years, in 1892, 2.03; Alix, at six years, in 1894, 2.03; Lou Dillon, at five years, in 1903, 2.03.

Sires of the above-named mares are: Lady Suffolk, by Engineer 3d; Highland Maid, by Saltram; Flora Temple, by Bogus Hunter; American Girl, by C. M. Clay Jr.; Lady Thorne, by Mambrino Chief; Goldsmith Maid, by Alexander's Abdallah; Maud S., by Harold; Sunol, by Electioneer; Nancy Hanks, by Happy Medium; Alix, by Patronage; Lou Dillon, by Sidney Dillon.

It will be seen that the progress of the mare in extreme speed has been irregular. Lady Suffolk's record stood for eight years, and then was three times beaten in one season. Flora Temple's epochal 2.19, the first mile ever trotted below 2.30, stood for ten years, and was then twice lowered in one season. Goldsmith Maid's 2.14 stood for six years, until 1890 Maud S. three times reduced it. Maud S.'s own crowning achievement, 2.03, was unassailed for six seasons, but in the next two Nancy Hanks had reached 2.03. "Our Nancy" reigned for two years, and then yielded her crown to Alix, who now, after a sway of nine years, relinquishes the sovereignty to Lou Dillon.

In this record of mares, eight—Lady Suffolk, Highland Maid, Flora Temple, Goldsmith Maid, Maud S., Sunol, Nancy Hanks and Alix—have each also held the world's supreme record. Will Lou Dillon be the ninth? She has a second and a quarter farther still to go to reach the goal. The gain of every fraction of a second at her rate of speed is a heart-breaking, nerve-racking, strength-exhausting effort, but the majority of those who know her best look for her to succeed. Still, should she never trot another fast mile she will, as we have said, remain a marvel—a mare without a parallel. We congratulate C. K. G. Billings upon possessing her; Ira Pierce, the survivor of her breeders, the Messrs. Pierce Bros., upon having bred her, and Millard Sanders, who has developed her speed and driven her to her record, upon her marvelous performance.

During the intense heat of July the Massachusetts Humane Society distributed over one thousand hats to relieve suffering horses.

At the meeting advertised at Empire City Park, New York, N. Y., there will be enforced a rule which will send to the stable all horses which do not stand for money at the end of the second heat. This means that unless a driver manages to get his horse up into the first four in either the first or second heat he must drop out of the race.

At the Columbus meeting two weeks ago the pacer Cuck went a mile alone in 2.04 in an advertised race to beat 2.05, but failed to beat 2.10 hooked to sulky. In England a month ago the guileless trotter Lady R. went a mile in 2.14 trying to beat 2.17. This is the fastest mile ever trotted in the old country.

The starting payments have been made on twenty-nine three-year-olds, twenty-three two-year-olds and seven pacers in the Horse Review Futurity to be decided at Cincinnati, Sept. 28-Oct. 3. Thirty-six of the trotters are by sires with standard records and all of the pacers.

An Indianapolis pacer with a trial of 2.14 weighs 1475 pounds.

Drowning Accidents.

In the official Log Book recently issued by the Bureau of Navigation, up-to-date instructions are given for "restoring the apparently drowned." These do not vary materially from those hitherto known and practiced by coast patrolmen, life-savers and others, except that the arms of the patient are not used as heretofore in restoring respiration.

One important point is laid stress on, however, in regard to a life symptom which heretofore has been considered a death symptom. The muscular rigidity and clenched jaws which hitherto has been considered a sign of death is now regarded as a sign of life. The Log Book says regarding this: "Dr. Labordette, the supervising surgeon of the hospital of Lisieux, in France, appears to have established that the clenching of the jaws and the semicontraction of the fingers, which have hitherto been considered signs of death, are, in fact, evidences of remaining vitality. After numerous experiments with apparently drowned persons, and also with animals, he concludes that these are only signs accompanying the first stage of suffocation by drowning the jaws and hands becoming relaxed when death ensues. This being so, the mere clenching of the jaws and semicontraction of the hands must not be considered as reasons for the discontinuance of efforts to save life, but should serve as a stimulant to vigorous and prolonged efforts to quicken vitality."

"Persons engaged in the tasks of resuscitation are, therefore, earnestly desired to take hope and encouragement for the life of the sufferer from the signs above referred to, and to continue their endeavors accordingly. In a number of cases Dr. Labordette restored to life persons whose jaws were so firmly clenched that, to aid respiration, their teeth had to be forced apart with iron instruments. The muscular rigidity of death is different. It sets in after the temporary relaxation of jaws and hands referred to above."

The first thing to do in the case of an apparently drowned person is to expose the face to a current of air, wipe dry the mouth and nostrils, rip the clothing so as to expose the chest and waist, and give two or three quick and smarting slaps on the stomach.

A Clever Rig

Attracts considerable attention, especially if everything is in keeping. A harness, a cart, whip, driver, and all must be quite like the grooming and attention shown to the horse. A horse to be lively, well and attractive must be properly fed. Glossiness will nourish his skin and produce soft, silky hair. Perfectly harmless. Article of unquestionable value. Found in the best stables. Printed matter if you want it. Price \$2. delivered.

W. K. FARMS CO., BOSTON, MASS., General Distributors.



TYPICAL AYRSHIRE BULL.

and chest with the open hand. If the patient does not revive immediately proceed thus:

Separate the jaws first, if they are clenched, and keep the mouth open by placing between the teeth a cork or small bit of wood. Turn the patient on the face, place small roll of clothing under the stomach and press heavily on it for about a minute, or so long as fluids flow freely from the mouth.

If respiration is not restored after three or four minutes of this treatment, the body should be rolled over again in an opposite direction from that of the first time, and any remaining water expelled from the system. Then the artificial respiration should be resumed and persisted in, if necessary, for from one to four hours, or until the patient breathes.

In the meantime the body should be briskly rubbed, especially the legs, always rubbing from the feet upward. Whiskey or brandy and hot water should be given in doses of a tablespoon every ten or fifteen minutes during the first hour after natural breathing has been restored and as often thereafter as may seem expedient.

The patient should be wrapped in flannels, put into a warm bed, but with a free circulation of fresh air. Rest must be maintained for forty-eight hours, and to prevent congestion of the lungs a warm mustard plaster should be ready at all times and applied to the chest when breathing becomes at all difficult.

Raising Calves Without Milk.

It is an extremely unwise policy to feed for veal or for beef the heifer calves from valuable and good milking cows. There are far too many unprofitable cows in the country, and the heifer calves from good milking cows ought to be grown to take the place of their mothers when their days of usefulness shall cease, and also to replace the poor cows. As milk is an article of diet in increasing demand, many farmers are desirous of getting the calves of their natural food as early as possible, and the problem to be solved is how to keep and grow the young animals.

Several excellent calf meals and milk substitutes are on the market, and a man may now sell his milk and still raise the calves from his best cows, so as to build up and strengthen his own herd, and also supply better material, if he has it, to his neighbors for the same purpose. Some persons, however, prefer their own mixtures. The following formula will make a very fair milk substitute: Flour 100 pounds, linseed meal 30 pounds, finely crushed linseed cake fifty pounds. Two and a half pounds of this mixture per day will be required for each calf. Soak it in boiling water, then add enough more water to make two gallons, and add a little sugar and salt before feeding.

As the result of a considerable amount of experimental work, the following mixture is said to give most satisfactory results: Wheat flour, thirty pounds; cocoanut meal, twenty-five pounds; nutmeg, twenty pounds; linseed meal, two pounds; dried blood, two pounds. One pound of this is added to six pounds of hot water, stirred for a few moments, allowed to cool to 100°, and fed to the calf from a pail or calf-feeder, the latter preferably. The calves are taken at seven to ten days old, and at first are fed twice a day on a ration of three pounds whole milk and one-half pound of the above mixture; in a few days—four to seven, depending on how the calf thrives—it is put on the full ration of calf meal. Wheat flour tends to keep the bowels from becoming too loose. Cocoanut meal contains twenty per cent. protein and nine per cent. fat. C. G. F.

Fruit Selling Well.

Apples are improving somewhat in quality, and the demand is good, especially for red cooking varieties like Astrachan. The range on native fruit is considerable. Perhaps to quote at \$1.25 to \$1.50 per bushel will give the fairest idea for the average shipper, although there are rates made as low as 75 cents and as high as \$2. Most nearby apples are Astrachan, Williams and Harvests. The supply seems rather light, but many who complain of the early crop say that winter varieties will do much better. The handsomest apples now for sale are some New Jersey Gravensteins which bring \$2.50 to \$3 per barrel. Native Gravensteins are as yet nothing but windfalls, worth about 75 cents per bushel. A few native pears are on hand, mostly Clapp's Favorite, and selling at \$1.50 per bushel. Peaches are in very light supply and likely to remain so. A few Northern grapes have appeared at New York, but this market is still supplied from the South at \$1.75 per carrier of eight baskets, about twenty-five pounds. Raspberries are nearly through and what are left bring 12 to 18 cents. Blackberries are in light supply. Blueberries are rather more plenty but still selling at good prices on account of the scarcity of other fruit. Melons from the South are very plenty and cheap.

At New York the market for apples is quiet and prices a little less firm, although strictly choice large and well selected fruit is not plenty. Pears are also quiet and slightly in buyers' favor. Southern grapes show better quality, and some advance is obtained for choice lots. Peaches continue scarce, and fancy quality is salable at very good prices, but most of the offerings are of ordinary grade and move slowly. Plums hold about steady. Very few blackberries are in and quotations nominally unchanged.

Huckleberries are steady. It is hard to get any fancy muskmelons, and a few such coming from the West bring comparatively good prices; these range widely, however, as some of them are of very ordinary quality; from nearby Southern points the receipts are nearly all inferior and pressing for sale at any reasonable offers. Watermelons are in fair demand, and quotations are well sustained.

The Fragrance of the Golden-Rod.

If those who have not already made full acquaintance with this everywhere-present flower (which many claim should be our national emblem) will test it for fragrance, I believe they will enjoy a very pleasant revelation, for in delirious, splay delirious, but few of our garden favorites can bring to us equal pleasure. It suggests that of the delicate veronica-like plant, the abronia umbellata. We refer to the most common species of golden-rod, that found in utter abundance everywhere about us, adorning with its golden beauty even the most barren of our waste places.

The coarser structured species which abound along the seashore are not so fragrant. I always bring any wild flower from my eye to my nose, and sometimes get a rich reward. How many of my friends have made acquaintance with the exceedingly rich fragrance of the blossom of the wild, low vine blackberry? Even the common "black vine," as the children call it, which is to be found as a weed in every garden adds a pleasing fragrance to the delicate beauty of a flower which we tread under foot.

Give the Orchard a Chance.

I know a Fayette County farmer (that made two or three trips a week to Uniontown and vicinity last fall, for three months. His average load brought him \$12. His orchard covered about five acres, and he told me he cleared some \$300. Where in the man in this section that cleared \$300 on five acres of wheat? Give your orchards a chance and they will pay you well. Keep the ground clear of insects by using plenty of salt.

Make a kettle of concentrated lye soap, take a strong solution of this, mixed with turpentine, in the proportion of one pint to five gallons, and wash your trees well, twice during the season, once in the early spring and once in the summer, scraping away all the old bark, dig around the root and pour in from one to two gallons of boiling lye, mixed with one gill of turpentine and one pint of salt well dissolved. Moorestown, Pa. J. REMALY.

Our Postal System.

We have the worst postal service of any civilized country in the world. There are improvements adopted in England, France, Germany and Italy, twenty and thirty years ago, which we have not yet adopted at home or only partially or imperfectly," so wrote R. H. Dana, in "The Appointment and Tenure of Postmasters," and James L. Cowles quotes this as a preface to his article in the Outlook on what the postoffice might do. He says that a dress-suit case was presented at the New York postoffice for mailing to New Haven, and after considerable parley it was accepted, the postage costing \$3.08. A few days later Mr. Cowles received a letter from Assistant Postmaster General Wynne stating that the postal service is intended for the interchange of correspondence and not to convey freight or express matter. Since 1885, says Mr. Cowles, our postal movement has been practically one step forward, two steps back.

THE PARCELS POST UNION.

As long ago as 1880, Dr. Stephan, the great postmaster-general of Germany, called round him the representatives of the leading nations of Europe and established the International Parcels Post Union. Today this service covers thirty-five of the countries of the World Letter-Post Union, and more than half the civilized world, but not the United States. Under it eleven-pound parcels go today from Germany to Egypt at a quarter, to Egypt for forty-five cents, and, by virtue of our one parcels post convention with a European power, to the United States for fifty-eight cents, plus our surtax of five cents—in all sixty-three cents.

THE SWISS REGULATIONS.

Switzerland takes eleven-pound parcels from any postoffice in the republic to the most distant chalet on the farthest Swiss Alp for eight cents, this charge also covering an indemnity of \$3 for a delay of over twenty-four hours beyond the proper delivery, and insurance against loss or damage up to \$5 a kilogram.

The Swiss post takes a forty-four pound packet from the postoffice to the address for thirty-three cents. There seems to be no limit to the weight of the Swiss parcel, and its only limit in bulk seems to be the size of a railway car door, two meters in any direction.

THE GERMAN POST.

The German post would have taken the suit-case—eleven pounds—any distance up to forty-five English miles for six cents, and greater distances within the combined area of Germany and Austria for twelve cents. The German parcels limit is fifty kilos, 110 pounds, and parcels up to this weight are now interchanged between Germany, Austria and Switzerland by post.

THE FRENCH SYSTEM.

France, inaugurating her parcels post with a three-kilo weight-limit in 1880, ex-

tended the limit to five kilos (eleven pounds) in 1892, and to ten kilos (twenty-two pounds) in 1897; with this result: "The radical measure of 1897, which involved an increase of one hundred per cent. on the weight of the parcels, proved a success."

SMALL SHARE OF THE UNITED STATES.

The great commercial nations of the earth are now handling in their domestic and international parcels services over 375,000,000 a year, having a value of thousands of millions of dollars.

There is an annual interchange of some fifty million international parcels a year. The share of the United States in this international service last year, parcels received and dispatched, was less than 150,000.

Notes from Washington, D. C.

The uncompromising hills of New England and likely those of other sections of the United States where cattle and the ordinary breeds of sheep cannot find a living, are likely to become stocked with a domesticated mountain sheep, which may rival the goat in its ability to live under conditions where other domestic animals would starve. Experiments are now being made with the famous Welsh sheep looking to this end. The editor of the Bureau of Animal Industry, George Fayette Thompson, had some interesting things to say to me on this subject the other day:

"In Wales one frequently hears the remark concerning the Welsh Mountain sheep," said Mr. Thompson, "that they make the best mutton grown in the world. A well-known firm of breeders of Hartford, Ct., in their efforts to find some breed of domestic animal that might thrive profitably on the hill farms of New England, determined to test the claims made for the mutton qualities of the Welsh sheep. Accordingly, they purchased fifty-seven ewes and two rams in Wales, in the neighborhood of Llanfairfawr, and they were shipped to this country in March, 1902. The North Wales Chronicle, in mentioning this incident, says: 'It is the first time that this breed of sheep has been exported, and if they become acclimatized quickly, more sheep of the same breed will be sent to America.'

"The Bureau of Animal Industry received a communication from the Hartford firm last November, stating that at that time the sheep had met fully all their expectations. They recognize, however, that a longer time is required, in order to ascertain fully the adaptability of this breed for the hilly portions of New England."

"The Welsh Mountain sheep is a breed which is believed to be native to the soil of Great Britain, not only in the mountains of the principality of Wales, but in the valleys as well, and also to the mountains and valleys of some sections of England. Recent times have seen the Welsh sheep yield their place in England and in the lower lands of Wales to the larger breeds, and they have been driven into the mountains of Wales, where they have thrived as no other breed is able to under like conditions."

"These sheep are hardy, delight in lofty situations and prove to be good nurses to their lambs. Few fences can control them. They rarely produce more than one lamb at a time, unless crossed with improved breeds."

"The Welsh Mountain sheep is quite small, yielding from five to eight pounds to the quarter of dressed meat. The crosses of the ram of the larger breeds and the ewes of this one have increased the size of the animal, and it would appear from the demand for the mutton thus produced that the peculiar flavor that is characteristic of the Welsh Mountain is still present. Welsh mutton is considered as one of the rarest delicacies of the Englishman's table, and in the grocers' shops it sells at two or three times the price of ordinary mutton. Henry Stewart, in the 'Shepherd's Manual,' says: 'It is a small, restless, exceedingly active sheep, white-faced, with a carcass yielding a quarter of twelve pounds or less, but of such tenderness of flesh and high, agreeable flavor, equal to that of venison, and which brings in the shops of English cities as much as a dollar a pound at the Christmas holidays and half as much as at other seasons.'

"The fleece of pure Welsh sheep weighs from two to three pounds. The fleece increases in weight considerably in crosses with the wool-bearing breed, and it is a staple of fine quality. It has, however, a mixture of hair, which tends to diminish its value. A peculiar characteristic of this wool is that it never shrinks, and it is this wool from which the popular Welsh flannels are fabricated. It is said, too, upon good authority, that the durability of this wool exceeds that of all the other breeds. It is usually homespun, and is woven at home into all sorts of clothing. The cloaks, all dyed red, which are worn so universally by the women, are made of this wool."

Three singular cases of farmers applying for pensions have recently come before the pension bureau. Many of the volunteers of the civil war were recently naturalized citizens from the old countries who could make themselves but imperfectly understood to the enlisting officers. One Frenchman who had but just come over and gone to farming in Wisconsin, was named Guillaume Sarrafin. His pronouncement of this name stamped the Federal officer. Finally he said, "In American it means buckwheat," and so he was enlisted and known as Bill Buckwheat. When he returned to his farm he resumed his name of Sarrafin, and now it has made him some little trouble and has necessitated the opinion of a French scholar to identify

Mr. Sarrafin with Mr. Buckwheat.

Another singular case is that of Charles Ziegenfuss of Pennsylvania, who translated his name to the enlisting officer of the regiment he entered as "Goatsfoot," under which name he was enlisted and known throughout his army service by his comrades. All the testimony necessary to establish his claim for a pension, of surviving comrades and officers, is descriptive of Charles Goatsfoot, and yet it is Mr. Carl Ziegenfuss who lives on his farm today in Pennsylvania with his numerous progeny of little Ziegenfusses, so that after these long years the question of proving the two men the same has caused him considerable worry.

Another pension case recently allowed is that of Fritz Eisenbeiss, who left his father's farm in the Dutch section of central Pennsylvania, when a mere lad, but of leonine mould and appearance. Like the residents of some of the entire counties of Pennsylvania at that time, he had not long been in the United States and could speak hardly a word of English. "Fritz Eisenbeiss," he gave his name, or something probably which may have sounded like that. "Eisenbeiss," he roared at the puzzled officer. "Eisenbeiss,—Ironbiter in America." "Good," said the officer. "I judge, you can, perhaps, bite nails." And so Fritz Ironbiter was enlisted and carried out in his appellation, for he was promoted twice for reckless bravery. Rising to be a captain he has had little difficulty in establishing his identity.

The new German meat inspection regulations are seriously affecting our exports to that country. Lard, fresh beef, pork, etc., have all decreased below the figures for last year. It is announced that the Turks are again eating the American hog. In other words, the Sublime Porte has removed the prohibition against American pork which has been in force since 1881. Nevertheless, our minister to Turkey has observed that probably nine-tenths of the salted meats consumed in Turkey were of American, under some foreign brand.

GUY E. MITCHELL.

I think the facts will warrant the assertion that no branch of agriculture has made the progress and improvement that there has been in fruit growing during the past fifteen years.—S. H. Dawes, Maine.

ALL ENERGY.

That's the only fitting description of this little power. And because it not only pumps, but saws, grinds, cuts, cleans, separates cream, churns, lifts, ciders, milks, ice cream freezers, etc. We call it the

Jack-of-all-Trades.

Unlike the human Jack it is master of every one, up to its limit, 2 full h.p. Think of the ways it can serve you. And you know it charges you only from 1 to 2 cents per hour for gasoline! It's always ready. Never balks or waits for wind to blow. Strong, safe, efficient. You need just such a power. Write for our free booklet on the Jack. All sizes, all purposes. Engines up to 200 h.p.

CHAS. J. JAGER COMPANY,
174 High Street, Boston, Mass.

SHORT-HORNS FOR SALE

AT PRIVATE TREATY.

On account of advanced age I will sell my entire herd of Short-horns, numbering about 100 head, nearly all females, of Bates, Flat Creek Young Mary, Rosemary and other tribes, many of them with calves at foot, and a good breeding stock. Have Scotch breeding and a number of other young bulls. I MEAN BUSINESS, and will sell in lots to suit purchaser at low prices.

ABRAHAM MANN,

106 miles south from Chicago on C. & E. R. Ry. ROSSVILLE, ILL.

WE HAVE SOME VERY GOOD PERCHERON STALLIONS

THAT we can sell at Very Prices and we have some excellent Percheron stallions that you will want to buy at Our Prices.

Don't wait until some one else gets what you want. Come soon and see every first-prize winner at the last Minnesota State Fair, excepting one.

T. L. & J. L. DeLANCEY, Importers, Northfield, Minn.

On C. M. & St. P. C. R. I. & P. and C. W. Rys.

ROBBINS SHORT-HORNS

WE BREED OUR SHOW CATTLE AND SHOW OUR BREEDING CATTLE

WE BRED All the females in the first prize herd at the International of 1902. All the females in the first prize young herd at the International of 1902. All the females in the first prize herd at the American Royal of 1902. All the females in the first prize young herd at the American Royal of 1902. We showed no calf herd at the American Royal but bred the sire of the first prize herd.

All these females except three were sired by our present stock bull THE LAD FOR ME. Of the remaining three one was a granddaughter of his, one a half-sister and the third was a granddaughter of GAY MON. ARDH. Write for what you want.

J. G. ROBBINS & SONS, Horace, Ind.

WOODLAND HEREFORDS

The home of the King and Queen of the breed, DALE and BETTY 2d. Sires in service are the \$10,000 DALE, champion bull of America; BEAU DONALD 3d and PERFECTION 3d.

This herd comprises such cows as BETTY 2d, champion cow 1901; CARNATION, the best-priced single female sold at public auction; LADY HELP, champion yearling at the English Royal, 1899; MILLY MAY, winner of special prize for cow and her produce at National Hereford Show, 1899; two choice sires of Dale, COLUMBIA and COLUMBIA 2d, and numerous others of like quality. Show stock of quality. Bulls and females for sale at all times. Visitors welcome.

J. C. ADAMS, Moweaqua, Ill.

FRED CORKINS, Herdsman.

HILLHURST SHORT-HORN'S.

BULLS IN SERVICE: IMP. JOY OF MORNING 153033. IMP. SCOTCH HERO 153033. IMP. LORD MOUNTSTEPHEN. All Bred at Collingly.

DISPERSION SALE AT HAMILTON, ONTARIO, AUGUST 11.

Particulars later. For catalogues address

M. H. COCHRANE, Hillhurst Station, P. Q., Canada.

SINNISSIPPI SHORT-HORNS

FRANK O. LOWDEN, Prop.

Herd headed by the prize-winning bull VALIANT 171057, assisted by the grand young Scotch bull GOOD MORNING 182755.

Young Bulls Suitable for Service for Sale.

Address all communications to W. J. & A. G. BAKER, Mgrs., OREGON, ILL. Telephone 36.

ROSEMONT HEREFORDS

HEADED BY THE FAMOUS ACROBAT 68460.

Assisted by MARQUIS OF SALISBURY 16th 13884, the best son of imp. Salisbury.

Catalogue on application. Correspondence solicited. Visitors welcome.

CHARLES E. CLAPP, BERRYVILLE, Clark Co., Va.

KEISER BROS., KEISER BROS. & PHILLIPS,

KEOTA, IA., RED KEY, IND., IMPORTERS AND BREEDERS OF

Percherons, Shires and French Coach Stallions.

Never were better prepared and disposed to furnish you such excellent horses at such conservative figures as at the present time.